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BEFORE THE ARIZONA CORPORATION COMMISSION

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IN THE MATTER OF THE APPLICATION OF
TUCSON ELECTRIC POWER COMPANY
FOR THE ESTABLISHMENT OF JUST AND
REASONABLE RATES AND CHARGES
DESIGNED TO REALIZE A REASONABLE
RATE OF RETURN ON THE FAIR VALUE
OF ITS OPERATIONS THROUGHOUT THE
STATE OF ARIZONA.

Docket No. E-01933A-12-0291

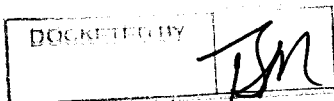
NOTICE OF FILING

The Residential Utility Consumer Office ("RUCO") hereby provides notice of filing
the Direct Testimony of Robert Mease, William A. Rigsby, and the redacted Direct
Testimony of Frank W. Radigan and Paul Goetz, in the above-referenced matter.

RESPECTFULLY SUBMITTED this 21st day of December, 2012.

Arizona Corporation Commission
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DEC 21 2012



Daniel Pozefsky
Chief Counsel

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2 of the foregoing filed this 21st day
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4 Docket Control
5 Arizona Corporation Commission
6 1200 West Washington
7 Phoenix, Arizona 85007

8 COPIES of the foregoing hand delivered/
9 mailed this 21st day of December, 2012 to:

10 Jane Rodda
11 Administrative Law Judge
12 Hearing Division
13 Arizona Corporation Commission
14 1200 West Washington
15 Phoenix, Arizona 85007

16 Janice Alward, Chief Counsel
17 Legal Division
18 Arizona Corporation Commission
19 1200 West Washington
20 Phoenix, Arizona 85007

21 Steven Olea, Director
22 Utilities Division
23 Arizona Corporation Commission
24 1200 West Washington
Phoenix, Arizona 85007

Bradley Carroll
Tucson Electric Power Company
88 E. Broadway Blvd, MS HQE910
P.O. Box 711
Tucson, Arizona 85702
bcarroll@tep.com

Michael Patten
Jason Gellman
Roshka DeWulf & Patten, PLC
One Arizona Center
400 E. Van Buren St., Suite 800
Phoenix, AZ 85004
mpatten@rdp-law.com
jgellman@rdp-law.com

Lawrence V. Robertson
P.O. Box 1448
Tubac, Arizona 85646
Attorney for SAHBA, EnerNOC, Inc. and
SAWUA
tubaclawyer@aol.com

C. Webb Crockett
Patrick J. Black
Fennemore Craig, PC
3003 N. Central Ave., Suite 2600
Phoenix, Arizona 85012-2913
Attorneys for Freeport-McMoRan and
AECC
wcrockett@fclaw.com

Kevin C. Higgins
Energy Strategies, LLC
215 S. State Street, Suite 200
Salt Lake City, Utah 84111
Consultant to Freeport-McMoRan and
AECC
khiggins@energystrat.com

Kurt J. Boehm
Jody M. Kyler
Boehm, Kurtz & Lowry
36 E. Seventh Street, Suite 1510
Cincinnati, Ohio 45202
Attorneys for Kroger

1 John William Moore, Jr.
7321 N. 16th Street
2 Phoenix, Arizona 85020
Attorney for Kroger
3
4 Stephen J. Baron
J. Kennedy & Associates
570 Colonial Park Drive, Suite 305
5 Roswell, Georgia 30075
Consultant to Kroger
6
7 Thomas L. Mumaw
Melissa Krueger
Pinnacle West Capital Corp.
8 P.O. Box 53999, MS 8695
Phoenix, Arizona 85072-3999
9 Thomas.Mumaw@pinnaclewest.com
10 Leland Snook
Zachary J. Fryer
11 Arizona Public Service Co.
P.O. Box 53999, MS 9708
12 Phoenix, Arizona 85072-3999
Leland.snook@aps.com
13 Zachary.fryer@aps.com
14 Timothy M. Hogan
Arizona Center for Law in the Public
15 Interest
202 E. McDowell Rd, Suite 153
16 Phoenix, Arizona 85004
Attorneys for SWEEP and Vote Solar
17 thogan@aclpi.org
18 Jeff Schlegel
SWEEP Arizona Representative
19 1167 W. Samalayuca Dr.
Tucson, Arizona 85704-3224
20 schlegeli@aol.com
21 Annie Lappe
Rick Gilliam
22 The Vote Solar Initiative
1120 Pearl St., Suite 200
23 Boulder, Colorado 80302
annie@votesolar.org
24 rick@votesolar.org

Nicholas J. Enoch
Jarrett J. Haskovec
Lubin & Enoch, PC
349 N. Fourth Ave.
Phoenix, Arizona 85003
Attorneys for IBEW Local 1116
Nick@lubinandenoch.com
Jarrett@lubinandenoch.com

Travis Ritchie
Sierra Club Environmental Law Program
85 Second St., 2nd Floor
San Francisco, California 94105
Travis.ritchie@sierraclub.org

Terrance A. Spann, Esq.
General Attorney
Regulatory Law Office (JALS-RL/IP)
U.S. Army Legal Services Agency
9275 Gunston Rd, Suite 1300
Fort Belvoir, Virginia 22060-5546
Terrance.a.spann.civ@mail.mil

Michael M. Grant
Gallagher & Kennedy, PA
2575 E. Camelback Rd
Phoenix, Arizona 85016
Attorney for AIC
mmg@gknet.com

Gary Yaquinto
President and CEO
Arizona Investment Council
2100 N. Central Ave., Suite 210
Phoenix, Arizona 85004
gyaquinto@arizonaic.org

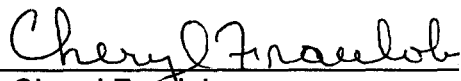
1 Cynthia Zwick
1940 E. Luke Ave.
2 Phoenix, Arizona 85016
czwick@azcaa.org

3 Court S. Rich
4 Rose Law Group, PC
6613 N. Scottsdale Rd, Suite 200
5 Scottsdale, Arizona 85250
Attorney for SEIA
6 crich@roselawgroup.com

7 Robert J. Metli
Munger Chadwick, PLC
8 2398 E. Camelback Rd, Suite 240
Phoenix, Arizona 85012
9 rjmetli@mungerchadwick.com

10 Rachel Gold
Senior Regulatory Analyst
11 Opower
642 Harrison St., Floor 2
12 San Francisco, CA 94110
rachel.gold@opower.com

13 Michael L. Neary
14 Executive Director
Arizona Solar Energy Industries
15 Association
111 W. Renee Drive
16 Phoenix, Arizona 85027

17
18 By 
Cheryl Fraulob

TUCSON ELECTRIC POWER COMPANY

DOCKET NO. E-01933A-12-0291

DIRECT TESTIMONY

OF

ROBERT B. MEASE

ON BEHALF OF

THE

RESIDENTIAL UTILITY CONSUMER OFFICE

DECEMBER 21, 2012

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EXECUTIVE SUMMARY

Tucson Electric Power Company ("TEP" or "Company") is a Class A public utility and is a wholly owned operating subsidiary of UNS Energy Corporation. TEP is an electric utility serving approximately 404,000 retail customers in the Tucson metropolitan area of Pima County as well as parts of Cochise County. TEP also sells electricity to other utilities and power marketing entities in the western United States.

On July 2, 2012, the Company filed a general rate application requesting a revenue increase of \$127.8 million or approximately a 15.3 percent increase over test year adjusted revenues of \$837 million. The average residential customer would see their monthly bill increase from \$85.17 to \$95.82, a monthly increase of \$10.65. RUCO is recommending a revenue increase of \$26.8 million, an increase of 3.1 percent over test year revenues.

The Company is also proposing an Original Cost Rate Base (OCRB) of \$1,519,073 and a Rate of Return of 8.52% while RUCO is proposing an OCRB of \$1,237,469 and a Rate of Return of 7.28%.

In addition to an increase in rates for all classes of TEP's customers the Company is also requesting modifications to its Purchase Power and Fuel Adjustment Clause (PPFAC) and a modified approach to funding the cost of its energy efficiency (EE) and demand side management (DSM) programs. The Company is also seeking to establish a lost fixed cost recovery program related to energy efficiency and renewable generation requirements and an environmental cost recovery mechanism.

INTRODUCTION

Q. Please state your name, position, employer and address.

A. My name is Robert B. Mease. I am Associate Chief of Accounting and Rates employed by the Residential Utility Consumer Office ("RUCO") located at 1110 W. Washington, Suite 220, Phoenix, Arizona 85007.

Q. Please state your educational background and qualifications in the utility regulation field.

A. Appendix 1, which is attached to this testimony, describes my educational background, work experience and regulatory matters in which I have participated. In summary, I joined RUCO in October of 2011. I graduated from Morris Harvey College in Charleston, WV and attended Kanawha Valley School of Graduate Studies. I am a Certified Public Accountant and currently licensed in the state of West Virginia. My years of work experience include serving as Vice President and Controller of Energy West, Inc. a public utility and energy company located in Great Falls, Montana. While with Energy West I had responsibility for all utility filings and participated in several rate case filings on behalf of the utility. As Energy West was a publicly traded company listed on the NASDAQ Exchange I also had responsibility for all filings with the Securities and Exchange Commission.

1 **Q. Please state the purpose of your testimony.**

2 **A.** The purpose of my testimony is to present RUCO's recommendations
3 regarding TEP's application for determination of the current fair value of its
4 utility plant and property and for a permanent increase in its rates and
5 charges passed on to ratepayers for utility services.

6
7 **Q. Please describe your work effort on this project.**

8 **A.** I reviewed financial data provided to me by the Company and performed
9 analytical procedures necessary to understand the Company's filing as it
10 relates to operating income, rate base, the overall revenue requirement for
11 the Company and future rate design that the Company is proposing. My
12 recommendations are based on these analysis. Procedures performed
13 include the in-house formulation and analysis of this data, the review and
14 analysis of the Company's responses to RUCO's data requests, a review
15 of data responses to the Commission Staff as well as other intervening
16 parties, and a review of prior ACC dockets related to TEP filings. I also
17 made on-site visits to TEP's Headquarters and Sundt generating plants
18 both located in Tucson, AZ, and San Juan generating plants, Nos. 1 and
19 2, located in Farmington, NM with Mr. Frank Radigan. Mr. Radigan is
20 serving as RUCO's consultant in the case and worked in conjunction with
21 RUCO's staff.

22

23

1 Q. Can you please identify the exhibits that you are sponsoring?

2 A. Yes, I am sponsoring schedules RBM -1 through and including RBM – 21.

3

4 Q. Please summarize the adjustments to rate base and operating
5 income issues addressed in your testimony.

6 A. My testimony addresses the following issues:

7

8 **RATE BASE ADJUSTMENT SUMMARY**

9 Rate Base Adjustment No. 1 – Gross Utility Plant in Service

10 RUCO is recommending reduction of Gross Utility Plant in Service by
11 \$230,152,657 as explained in the direct testimony of RUCO consultant,
12 Frank Radigan.

13

14 Rate Base Adjustment No. 2 – Accumulated Depreciation

15 As explained in the direct testimony of RUCO consultant, Frank Radigan,
16 RUCO is recommending reducing the Accumulated Depreciation Account
17 by \$133,708,325.

18

19 Rate Base Adjustment No. 3 – Accumulated Deferred Income Taxes
20 (ADIT)

21 RUCO has removed TEP's inclusion of Net Operating Loss (NOL) in
22 ADIT, \$67,051,372 based on the belief that the inclusion of the Deferred
23 Tax Asset resulting from the 2011 NOL is not correct and the Company's

1 inclusion in rate base does not conform to the position the Commission
2 has taken in the past.

3
4 Rate Base Adjustment No. 4 – Regulatory Liability

5 RUCO is recommending that the Company establish a Regulatory Liability
6 of \$102,784,786 for the excess depreciation that should be returned to the
7 ratepayers.

8
9 Rate Base Adjustment No. 5 – Regulatory Asset (Nogales Transmission
10 Line)

11 RUCO has been advised that the Company will seek recovery for the sunk
12 costs, \$11,088,732, related to this project at FERC prior to making
13 application before this Commission.

14
15 Rate Base Adjustment No. 6 – Allowance For Working Capital

16 Cash Working Capital should be decreased by \$4,266,000 based on
17 adjustments to various operating expense accounts.

18
19 **OPERATING INCOME ADJUSTMENT SUMMARY**

20 Operating Income Adjustment No. 1 – Other Operating Income
21 (Springerville Units 3 and 4 - Rental Income)

22 The Company's proposal for splitting \$6,931,002 income received from
23 the rental of coal handling equipment and common facilities is not in the

1 best interest TEP ratepayers. The income is related to rental activities
2 generated from Springerville Units 1 and 2 and should be included in other
3 operating revenue. Accordingly, RUCO has reversed TEP's adjustment.

4
5 Operating Income Adjustment No. 2. – Depreciation Expense

6 RUCO is recommending a reduction in test year depreciation expense by
7 \$26,365,701. RUCO consultant Frank Radigan will provide testimony on
8 this adjustment.

9
10 Operating Income Adjustment No. 3 – Payroll Expense

11 RUCO does not agree with the methodology used by the Company in
12 calculating test year payroll expense adjustment and proposes a reduction
13 in test year expense of \$1,470,721.

14
15 Operating Income Adjustment No. 4– Incentive Compensation Adjustment

16 RUCO believes that all incentives paid to employees should be split
17 between the shareholders and ratepayers. The proposed adjustment
18 reduces operating expenses by \$2,530,620.

19
20 Operating Income Adjustment No. 5 – Payroll Tax Expense Adjustment

21 RUCO is recommending a reduction in payroll tax expense of \$272,631
22 resulting from the proposed reduction of payroll expenses and incentive
23 adjustments.

1 Operating Income Adjustment No. 6 – Amortization Nogales Line

2 RUCO is proposing eliminating the total test year adjustment of
3 \$2,982,638 related to amortization of the Nogales Transmission Line (See
4 Rate Base Adjustment No. 5, and Operating Expense Adjustment No. 2)

5
6 Operating Income Adjustment No. 7 – Overhauls and Outage

7 Overhaul and Outage Expenses is calculated incorrectly by the Company
8 and RUCO is taking exception. RUCO is proposing an adjustment to test
9 year income by \$4,883,016.

10
11 Operating Income Adjustment No. 8 – INTENTIONALLY LEFT BLANK

12
13 Operating Income Adjustment No. 9 – Officers and Directors Insurance

14 RUCO believes that officers and directors insurance expense should be
15 the responsibility of the shareholder as well as the ratepayer and should
16 be shared equally. RUCO's proposal reduces the Company's operating
17 income by \$289,320.

18
19 Operating Income Adjustment No. 10 – Lime Expense

20 RUCO is proposing that the Company's test year adjustment to the lime
21 expense account be reduced by \$149,998.

1 Operating Income Adjustment No. 11 – Rate Case Expense

2 The Company's request for the recovery of rate case expense is
3 excessive and should not be borne entirely by TEP's ratepayers. RUCO
4 is proposing the Company rate case expense of \$500,000 be approved by
5 the Commission.

6
7 Operating Income Adjustment No. 12 – Miscellaneous and General
8 Expense

9 RUCO is proposing to eliminate Company contributions of \$2,139,016
10 from test year results.

11
12 Operating Income Adjustment No. 13 – Property Tax Expense

13 An adjustment to property tax expense, of \$3,110,547 is being proposed
14 by RUCO due to the proposed reduction in the Company's rate base.

15
16 Operating Income Adjustment No. 14 – Income Tax Adjustment

17 RUCO is proposing that current year's income tax expense be increased
18 by \$22,535,476.

REVENUE REQUIREMENTS

Q. Please summarize the results of RUCO's analysis of the Company's filing and identify RUCO's recommended revenue increase, operating income requirement as well as the Company's Original Cost Rate Base (OCRB) and Fair Value Rate Base (FVRB).

A. RUCO is recommending a revenue increase as follows:

<u>000's</u>	<u>TEP</u>	<u>RUCO</u>	<u>DIFF.</u>
Increase in gross revenue	\$127,765	\$ 26,781	(\$100,984)
Increase in revenues required	15.27%	3.07%	(12.20%)

RUCO is recommending operating income levels as follows:

<u>000's</u>	<u>TEP</u>	<u>RUCO</u>	<u>DIFF.</u>
Required operating income	\$129,484	\$97,612	(\$ 31,872)

RUCO is recommending OCRB and FVRB as follows:

<u>000's</u>	<u>TEP</u>	<u>RUCO</u>	<u>DIFF.</u>
Original Cost Rate Base	\$1,519,073	\$1,237,439	(\$ 281,634)
Fair Value Rate Base	\$2,280,216	\$1,910,221	(\$ 369,996)

RATE BASE

Q. Can you please explain your determination of the FVRB as shown on Schedule RBM-1?

A. RUCO's determination of the FVRB consists of three elements. First, the value of the OCRB was restated to reflect RUCO's adjustments to the rate

1 base determinants. Second, the value of RCND (Reconstruction Cost
2 New less Depreciation) was computed by multiplying RUCO's adjusted
3 OCRB by the ratio of the Company's OCRB to its RCND as filed. Third,
4 the FVRB was computed on an equally weighted basis (50/50 split)
5 between RUCO's OCRB and RUCO's re-computed RCND.

6
7 **Q. Can you elaborate on the adjustments RUCO is proposing to the**
8 **OCRB?**

9 **A.** Yes. I will describe each of the adjustments that RUCO is recommending
10 to the OCRB as filed by the Company.

11
12 Rate Base Adjustment No. 1 – Gross Utility Plant in Service

13 **Q. Can you please explain RUCO's proposed adjustment to Gross**
14 **Utility Plant in Service?**

15 **A.** RUCO is recommending reduction of Gross Utility Plant in Service by
16 \$230,152,657 based on the recommendation of RUCO consultant Frank
17 Radigan.

Rate Base Adjustment No. 2 – Accumulated Depreciation

Q. What adjustments has RUCO recommended to the Company's Accumulation Depreciation accounts?

A. Based on the recommendation of RUCO consultant, Frank Radigan, RUCO is recommending reducing the Accumulated Depreciation Account by \$133,708,325.

Rate Base Adjustment No. 3 – Accumulated Deferred Income Taxes (ADIT)

Q. Does RUCO take exception to any items included as a deferred tax asset or liability?

A. Yes. RUCO does not believe that the inclusion of the Deferred Tax Asset related to the 2011 Net Operating Loss (NOL) is appropriate and the Company's inclusion in rate base does not conform to the position the Commission has taken in the past. Simply stated, the Company has made a voluntary election to take "bonus depreciation" which benefits the company but not the ratepayer, and will result in higher rates that the ratepayer would otherwise not have to pay.

Q. Can you identify those instances where the Commission has not allowed the inclusion of NOL's in the Company's filings?

A. There are two cases noted, Las Quintas Serenas Water Company, Decision No. 72498, and Rio Rico Utilities, Inc., Decision No. 72059. In

both cases the Commission's decision did not allow for the inclusion of the Deferred Tax Asset created by the NOL, to be included in the calculation of the Company's rate base.

Q. Can you identify the Company's NOL carryforward from year 2011 and what is the impact on the Deferred Tax Asset account?

A. The Company's NOL carryforward for year 2011 was \$231,860,076.¹ The impact on the ADIT accounts as described by the Company:

FED & NM NOL Carryforward	\$ 82,071,149
(Federal and New Mexico)	
AZ NOL Carryforward	1,256,587
Post Test Year Plant NOL	3,161,209
Delayed Plant Adj. NOL	<u>2,722,576</u>
TOTAL TEP	<u>\$ 89,211,521</u>
(ACC Jurisdictional \$67,051,372)	

Q. Can you explain how the NOL has an effect on rate base?

A. Yes. I will give an example using the FED & NM NOL Carry forward as the basis for my calculation:

NOL Carryforward Year 2011	\$231,860,076
Federal Tax Rate	35.000000 %
NM Tax Rate	<u>0.396844%</u>
Sum of both Tax Rates	<u>35.396844</u>
NOL Included in Rate Base (ADIT)	<u>\$ 82,071,149</u>
(ACC Jurisdictional \$61,684,675)	

¹ See Company's response to RUCO Data Request No. 3.09

1 The ADIT increases the total rate base as it is recorded on the Company
2 balance sheet as an asset.

3
4 **Q. What is the primary reason for the Company's NOL for year 2011?**

5 A. The Company has taken advantage of "Bonus Depreciation" for years
6 2008 and maximized in year 2011. In general, for the years 2008, 2009,
7 and 2010 (through September 8, 2010) bonus depreciation of 50 percent
8 of the cost of qualifying assets placed in service was allowed as a tax
9 deduction to arrive at taxable income. Qualifying assets placed in service
10 after September 8, 2010 and continuing through 2011, one hundred
11 percent of the cost was allowed as a tax deduction.

12

13 **Q. What is the purpose in creating such tax benefits?**

14 A. Whenever governmental legislation permits such "write-offs" for business
15 it is believed that additional investments will be made by businesses for
16 the benefit of stimulating the economy. By allowing accelerated
17 depreciation deductions additional cash is provided for further investment
18 or providing additional employment opportunities. The most recent
19 governmental legislation was entitled Tax Relief, Unemployment
20 Insurance Reauthorization and Job Creation Act of 2010. This bill
21 provided for 100 percent bonus depreciation for qualified property placed
22 in service after September 8, 2010 and before January 1, 2012.

1 **Q. Are company's required to record bonus depreciation if investments**
2 **are made in qualifying assets?**

3 A. No. Companies can elect to take bonus depreciation or not take the bonus
4 depreciation.

5
6 **Q. What was the Company's total NOL attributable to bonus**
7 **depreciation?**

8 A. Of the Company's total NOL of \$231,860,076 for year 2011,
9 \$243,092,468 was directly attributable to bonus depreciation.²

10
11 **Q. What are the Company's options related to NOL's?**

12 A. NOL's can be carried back two years in order to recover prior year's tax
13 payments and/or carried forward for a maximum of twenty years or until
14 the NOL is utilized. TEP has indicated³ that they will carryforward the total
15 NOL to future years.

16
17 Rate Base Adjustment No. 4 – Regulatory Liability

18 **Q. Does the Company have any existing regulatory liabilities?**

19 A. No. As of the end of the test year the Company had no regulatory
20 liabilities recorded on their financial statements.

21

² See Company response to RUCO Data Request No. 3.09

³ See Company response to RUCO Data Request No. 3.12

1 **Q. Is RUCO recommending the establishment of a Regulatory Liability?**

2 A. Based on the recommendation of RUCO witness Frank Radigan, RUCO is
3 recommending that the Company establish a Regulatory Liability for the
4 excess depreciation that should be returned to the ratepayers. The net
5 adjustment to the liability account is \$102,785,000. (The total excess
6 depreciation that should be returned to ratepayers is \$123,342,000 less
7 depreciation returned to ratepayers for this test year of \$20,557,000).

8
9 **Q. Can you explain why RUCO believes that there is excess**
10 **depreciation and why any excess depreciation should be paid back**
11 **to ratepayers?**

12 A. A complete explanation of this adjustment is included in the testimony of
13 Mr. Radigan.

14
15 Rate Base Adjustment No. 5 – Regulatory Assets (Sahuarita Nogales
16 Transmission Line Project)

17 **Q. Can you please explain the project identified as the Sahuarita**
18 **Nogales Transmission Line?**

19 A. TEP began to consider a transmission link to Mexico after participating in
20 the "United States – Mexico Electricity Trade Study" in 1991. The study
21 identified potential economic and technical benefits from increased trade
22 and cooperation between U.S. and Mexican utilities and expressed hope

1 that the report would prompt utilities to begin studying specific projects.⁴

2 In 2000, TEP entered into a memorandum of understanding with Citizens
3 Utilities, the City of Nogales electricity provider, to work together to design,
4 site, permit, and build what would ultimately become known as the
5 Sahuarita-Nogales 345-kV Transmission Line Project.

6
7 Between October 2000 and March 2005, TEP incurred expenses of
8 \$11,088,732 related to this project. The costs include expenses for line
9 siting, engineering, consulting and other costs necessary to get the project
10 to the construction phase of \$8,947,914 and \$2,140,818 related to the
11 acquisition of land and land rights.

12
13 **Q. Why did the project never materialize?**

14 **A.** The Commission approved the construction route along the “western”
15 corridor in 2002 but before the construction began the Department of
16 Energy in March of 2005 released a final decision that indicated the
17 “central” corridor was preferred by the U.S. Forest Service. Because the
18 “central” corridor conflicted with the Commission’s decision, TEP was left
19 without authorization to build along a single route. In addition, additional
20 improvements have been made to existing transmission systems and the
21 345-kV transmission line is no longer needed.

22

⁴ See Mr. DeConcini’s testimony pages 38 through 40.

1 **Q. What has the Company proposed related to the costs incurred to**
2 **date?**

3 A. TEP is proposing an adjustment to recover costs not invested in tangible
4 assets, land and land rights. In summary, TEP is requesting to amortize
5 \$2,982,638 ($\$8,947,914 / 3$) for three years and has made a test year
6 adjustment to recognize this expense.

7
8 **Q. Can you please explain RUCO's proposed adjustment to the**
9 **Sahuarita Nogales Transmission Line Project?**

10 A. RUCO does not believe that the costs of this project should be charged to
11 TEP utility ratepayers as they have not benefited from these expenditures.
12 RUCO therefore is proposing that the amortization expense of \$2,982,638
13 be removed as a test year operating expense adjustment and the total
14 cost of the project, \$11,088,732, which includes both the land and land
15 rights, be removed from rate base.

16
17 **Q. Has RUCO learned that the Company's request may be withdrawn?**
18 **And if so, what is RUCO's position?**

19 A. Yes, RUCO understands that the Company has withdrawn its request for
20 the time being and will seek relief before the FERC. Depending on the
21 decision made by FERC the Company may later renew its request before
22 the Commission. RUCO does not object to this option.

1 Rate Base Adjustment No. 6 – Cash Working Capital

2 **Q. Please explain RUCO's adjustment to Cash Working Capital.**

3 A. RUCO is recommending a Cash Working Capital decrease of \$4,266,000.

4 The adjustment is the result of RUCO's proposed expense reductions.

5

6 **OPERATING INCOME**

7 **Q. Is RUCO recommending changes to the Company's proposed test**
8 **year operating revenues and expenses?**

9 A. Yes. The Company proposed numerous adjustments to its historical test
10 year operating income. RUCO analyzed the Company's adjustments and
11 proposed several changes. In addition, RUCO is recommending
12 additional adjustments based on data requests provided by TEP. RUCO's
13 adjustments to operating income are explained as follows.

14

15 Operating Income Adjustment No. 1 – Other Operating Income
16 (Springerville Units 3 and 4 - Rental Income)

17 **Q. Can you please explain the source of the rental income received**
18 **from the Springerville Units 3 and 4 and the Company's proposal for**
19 **reporting the rental income?**

20 A. The owners of Springerville Units 3 and 4 pay TEP a monthly fee as
21 compensation for use of the fuel handling facilities (\$630,833) and
22 common facilities (\$529,334) that previously served only the Springerville
23 Units 1 and 2. TEP has proposed that only 50 percent of the rental

1 income, $(\$630,833 + \$529,334) \times 12 = \$13,933,004 / 2 = \underline{\$6,961,002}$, be
2 shared with ratepayers in the proposed cost of service.⁵

3
4 **Q. What is the Company's justification for recognizing only 50 percent**
5 **of this income in TEP's proposed revenue requirements?**

6 A. The Company has indicated several reasons that sharing of this revenue
7 is appropriate. First, the initial development of Springerville Units 3 and 4
8 was managed by TEP's sister Company, UniSource Energy Development
9 Company (UED). Over a three year period, UED invested approximately
10 \$32.8 million in development costs that were borne by the shareholders of
11 UNS Energy. Development rights to Units 3 and 4 were ultimately
12 transferred to Tri-State Generating and Transmission Association ("Tri-
13 State") and Salt River Project ("SRP") respectively, and both units are now
14 complete and operating. Second, the Company has estimated savings
15 totaling approximately \$21 million in the Company's test-year revenue
16 requirements resulting from spreading O&M and administrative costs as
17 well as property tax expenses over four units instead of just two units.

18
19 **Q. Despite the Company's explanation for sharing of the rental revenue**
20 **is RUCO recommending an adjustment?**

21 A. Yes. RUCO proposes that the full amount of \$13,933,004 represents
22 rental revenues that should remain in the test year for the benefit of

⁵ See Company response to RUCO Data Request 8.04

1 ratepayers. First, while RUCO understands that the initial investment may
2 have been the risk of a sister Company this reasoning does not support
3 ratepayers having to pay higher rates. Second, TEP has identified
4 approximately \$21 million in savings as a result of sharing costs between
5 four units as opposed to two units. TEP should continuously be looking
6 for such savings particularly during periods of slow growth and increasing
7 costs. The Company stated in its testimony that operating expenses
8 continue to increase and that cost control measures are constantly being
9 initiated. Reducing operating expenses, while maintaining a safe and
10 reliable system, are a normal and continuing business objective and does
11 not provide justification for the sharing of expenses or revenues.
12 Recognizing the total revenues generated from these facilities, should be
13 for the benefit of the ratepayers and not shared with Company
14 shareholders.

15
16 Operating Income Adjustment No. 2. – Depreciation Expense

17 **Q. Can you please explain your adjustment to depreciation expense?**

18 **A.** RUCO is recommending a reduction in test year depreciation expense by
19 \$26,365,701 as explained by Mr. Radigan in his testimony.

Operating Income Adjustment No. 3 – Payroll Expense

Q. Did TEP make test year adjustments related to payroll increases?

A. Yes. TEP calculated payroll increases and included a test year adjustment.

Q. Does RUCO agree with the calculation and can you explain the methodology used by TEP in calculating wage increases?

A. No. RUCO does not agree with the method used. The Company took the average Operation and Maintenance total wages for years 2010 and 2011, and then calculated a 3 percent increase for years 2012 and 2013. The total calculated increase for both years 2012 and 2013 were then included as a test year adjustment. RUCO takes the position that including a second year of anticipated increases is too far removed from the test year to be included as an adjustment and is recommending that the calculated increase for year 2013, \$1,470,721, be removed from test year adjustments.

Operating Income Adjustment No. 4 – Incentive Adjustment

Q. Can you please explain operating income adjustment 4?

A. RUCO believes that all incentives paid to employees should be split between the shareholders and ratepayers. TEP excluded 50 percent of the incentive payment made to officers but maintained 100 percent of payments to all other employees. The Commission's normal practice is to

1 approve the sharing of incentive payments between shareholders and
2 ratepayers has been accepted. (See UNS Gas, Inc. Decision No. 70011,
3 UNS Electric Decision No. 70011 and Southwest Gas Decision No.
4 70665) In addition, there is no assurance that incentive payments
5 included as a test year adjustment will be paid out in future years as they
6 are based on performance.

7
8 **Q Can you identify incentive plans available to employees of TEP?**

9 A. All TEP non-union employees, including officers, participate in UNS's
10 short-term incentive Performance Enhancement Plan (PEP) which is tied
11 to annual compensation. The structure determines eligibility for certain
12 bonus levels by measuring UNS's performance as it impacts investors,
13 customers, community/environment and employees.

14
15 **Q. Has the Company included long term incentive plan payments in the**
16 **test year adjustments?**

17 A. No. The Company has not included long term incentive plan payments as
18 an adjustment.

19
20 **Q. What is RUCO proposing as a test year adjustment for incentive**
21 **payments?**

22 A. RUCO is proposing a reduction in the Company's post-test year
23 adjustment for incentive payments of \$2,530,620.

1 Operating Income Adjustment No. 5 – Payroll Tax Expense Adjustment

2 **Q. Why is RUCO making an adjustment for payroll tax expenses?**

3 A. RUCO is recommending a reduction in payroll tax expense of \$272,631
4 resulting from the proposed reduction of payroll expenses, \$82,835, and
5 incentive adjustments \$189,796.

6
7 **Q. Is RUCO recommending any other adjustments to payroll tax**
8 **expenses?**

9 A. No.

10
11 Operating Income Adjustment No. 6 – Amortization Nogales Line

12 **Q. Can you please explain your adjustment to amortization?**

13 A. RUCO is proposing eliminating the test year adjustment for amortization of
14 the Nogales Transmission Line. RUCO does not believe that the
15 ratepayers should be responsible for potential write-off as they have
16 received no benefit from this expenditure. (See Rate Base Adjustment
17 No. 5 and Operating income Adjustment No. 2)

18
19 Operating Income Adjustment No. 7 – Overhauls and Outage

20 **Q. Is RUCO recommending a reduction to the Company's post-test year**
21 **adjustment to Overhaul and Outage Expense?**

22 A. Yes. RUCO is proposing a reduction to test year expense by \$4,833,016.

23

1 **Q. How did the Company calculate their test year adjustment to this**
2 **expense?**

3 A. TEP computed an estimated annual cost based on budgeted amounts for
4 years 2012 through and including 2018, for each plant. The budgeted
5 cost for each type of overhaul, major and minor was then applied to the
6 frequency for each plant where a major or minor overhaul was going to
7 occur. The calculated average was then applied to each plant location to
8 arrive at the Company's total test year adjustment.

9
10 **Q. Why does RUCO oppose the method used by the Company?**

11 A. First, estimating costs to year 2018, does not comply with sound rate
12 making principles. Second, calculating seven years of future costs does
13 not represent an accurate known and measurable adjustment. Including
14 seven years of average costs would overstate the test year adjustment
15 significantly.

16
17 **Q. Would you please explain how RUCO arrived at its proposed**
18 **adjustment?**

19 A. The Company provided all details for their adjustment to this expense.
20 The schedule identified the year, 2012 through 2018, the location, and
21 budgeted costs broken down into both major and minor overhauls. The
22 Company estimated 2012 budgeted cost is \$9,825,000. RUCO included

1 the estimated 2012 costs as a known and measurable change and
2 reduced the test year adjustment accordingly.

3
4 Operating Income Adjustment No. 8 – Intentionally Left Blank

5
6 Operating Income Adjustment No. 9 – Officers and Directors Insurance

7 **Q. Can you please explain RUCO's adjustment to Officers and Directors**
8 **Insurance Expense?**

9 A. RUCO believes that Officers & Directors Liability Insurance expense is the
10 type of expense that should be shared equally between ratepayers and
11 shareholders. RUCO has reduced test year ACC Jurisdictional operating
12 expenses by \$289,320 representing a 50/50 split between the shareholder
13 and the ratepayer.

14
15 **Q. Why does RUCO believe this expense should be equally shared?**

16 A. Officers & Directors Liability Insurance primarily is for the purpose of
17 protecting officers and directors from potential lawsuits. In many cases
18 these lawsuits are from irate shareholders. Benefits paid out under this
19 insurance coverage provides cash available to shareholders that would
20 have been paid by the Company had the Company not had in place such
21 liability insurance coverage. It also provides the Company with the ability
22 to attract and retain qualified directors and officers as they are relieved
23 from personal liability when making decisions on behalf of the Company.

1 **Q. Has the ACC approved a 50/50 sharing of Director's & Officers (D&O)**
2 **Insurance expense in past rate case filings?**

3 A. The adjustment representing a 50/50 sharing of D&O insurance was
4 proposed in the Southwest Gas Corporation most recent rate case in
5 Docket No. G-01151A-10-0458. This case resulted in settlement,
6 Decision No. 72723, and incorporated the proposed sharing of the D&O
7 expense on a 50/50 percent basis.

8
9 Operating Income Adjustment No. 10 – Lime Expense

10 **Q. Would you please explain the adjustment to this expense account?**

11 A. Yes. TEP, when filing their initial rate application, under-estimated "sulfur
12 credits" used as an offset to monthly lime costs. The Company originally
13 estimated sulfur credits through the month of April, 2012, and then
14 annualized these four months as a basis for the test year adjustment. The
15 monthly sulfur credits have since been updated through September, 2012,
16 and based on the addition of an additional five months the annualized
17 sulfur credits have increased. RUCO is proposing a reduction in the
18 Company's test year adjustment to lime expense by \$149,998 as a result
19 of including the additional five months of credits.

Operating Income Adjustment No. 11 – Rate Case Expense

Q. Please explain your adjustment to Rate Case Expense.

A. The Company has proposed recovery of \$1,415,000 for rate case expenses for outside services and requests to amortize this expense over a three year period. RUCO believes the Company's proposed rate case expense is excessive, and should be reduced significantly, when compared with rate case expense in prior rate case submissions that have been approved by the Commission. RUCO proposes that the rate case expense should be amortized over a four year period, as the Company is currently doing, rather than the three year proposed period.

Q. Has RUCO proposed an adjustment to TEP's level of rate case expense to be recovered from ratepayers?

A. Yes. RUCO proposes a more appropriate level of rate case expense of \$500,000 given that this case is more involved than the other cases that RUCO has reviewed. By comparison, RUCO believes \$500,000 in rate case expense is reasonable under the circumstances of this case. RUCO further proposes that the amortization period be over a four year period, \$125,000, as was authorized during the last rate case.

Q. How did RUCO arrive at its adjustment to rate case expense?

A. RUCO compared the Company's proposed level of rate case expense to rate case expense that was approved in other rate cases before the

Commission. Based on this review, RUCO believes that the Company's request is not reasonable in this case and should be reduced to a more appropriate level.

Q. What other cases did RUCO review?

A. RUCO reviewed the last three UNS Gas cases (Decision Nos. 73142, 71623 and 70011). The amount approved by the Commission were \$400,000, \$300,000 and \$300,000 respectively. Also, in the most recent UNS Electric rate case filing the Commission approved rate case expense recovery of \$276,000. (Decision No. 70360)

Operating Income Adjustment No. 12 –Miscellaneous and General Expenses

Q. Can you please describe RUCO's adjustment for charitable contributions made by the Company?

A. Yes. RUCO believes it is extremely important for TEP to be a good corporate citizen and contribute to local community activities and charities. However, RUCO does not believe that contributions to charitable activities constitute an expense that should be passed on to ratepayers. The total reduction in test year operating income for charitable contribution is \$39,016.

1 A second adjustment to this account relates to the reduction of operating
2 expenses, \$2,100,000, for the new office building. RUCO is
3 recommending that the operating expenses of the facility be eliminated
4 from expenses as RUCO is recommending that the building be removed
5 from rate base as well as the operating expenses. (See FWR testimony)

6
7 Operating Income Adjustment No. 13 – Property Tax Expense

8 **Q. Does RUCO accept the Company's methodology in calculating**
9 **property tax expense?**

10 A. Yes. The method used by the TEP in this rate case is consistent with prior
11 cases as filed and has been accepted by RUCO.

12
13 **Q. Why is RUCO making an adjustment to the Company's property**
14 **taxes as filed?**

15 A. RUCO is proposing a reduction in gross plant in service by \$230,152,657,
16 as discussed in Rate Base Adjustment No. 1. As a consequence of
17 excluding plant from rate base the property taxes associated with the
18 proposed reduction in plant is also reduced. The reduction in allowable
19 property taxes based on the recalculated expense is \$3,110,547.

Operating Income Adjustment No. 14 – Income Tax Expense

Q. Has RUCO made an adjustment to Income Tax Expense as filed by the Company?

A. Yes. RUCO has adjusted this expense based upon the methodology that is used in all rate applications reviewed by RUCO.

Q. Can you explain the method utilized in calculating income tax expense both for the test year adjustment as well as the method used in calculating the tax effects of proposed revenue adjustments?

A. When calculating income tax expense for rate making purposes RUCO begins with operating income before taxes and from that amount will deduct Arizona income taxes due and interest synchronization. (Interest synchronization is calculated as follows: Adjusted ACC Jurisdictional Rate Base X Weighted Cost of Debt) The two results, Arizona income taxes and interest synchronization, are multiplied by the statutory Federal Income Tax Rate. In this case RUCO has used 35 percent as the statutory Federal Income Tax Rate.

Q. When applying this methodology to the RUCO's proposed test year operating income what was the result?

A. There was an additional income tax expense proposed by RUCO of \$22,525,476 and added to the Company's operating expenses.

1 **Q. Was there an adjustment to income tax expense after RUCO's final**
2 **revenue requirement was determined in this rate filing?**

3 A. Yes. The increase in income tax expense related to RUCO's additional
4 revenue requirement is \$10,622,584.

5
6 Purchased Power and Fuel Adjustment Clause – ("PPFAC")

7 **Q. Does TEP currently have a PPFAC in place?**

8 A. Yes. TEP has a PPFAC in place since the last rate case. The PPFAC
9 was established in Decision No. 70628.

10
11 **Q. Can you explain the basic concept of the PPFAC?**

12 A. The PPFAC is a mechanism approved by the Commission that allows the
13 Company to recover its purchased power and fuel expenses. The
14 allowable expenses to be recovered in the PPFAC include fuel and
15 purchased power costs incurred to provide service to retail customers as
16 well as direct costs of contracts used for hedging the system fuel and
17 purchased power. The specific cost components include FERC accounts:
18 501 - Fuel and Steam; 547 - Fuel Other Production; 555 - Purchased
19 Power; and 565 - Wheeling - Transmission of Electricity by Others. As an
20 offset to these costs the following are to be credited back to TEP's
21 customers through the PPFAC: (1) short-term off-system wholesale
22 revenue recorded in FERC account 447; (2) 10 percent of annual positive

1 wholesale trading profits, and; (3) 50 percent of the revenues from sales of
2 SO₂ emission allowances.

3
4 The PPFAC also established an average retail base cost of fuel and
5 Purchased Power recovery component of \$0.028896 per kWh, established
6 forward and true up components, and established the first PPFAC year
7 beginning April 1, 2009.

8
9 Finally, specific dates were identified for filing updates to the forward and
10 true up components and for the PPFAC rate with all component
11 calculations, including supporting data. TEP also has the ability to request
12 an adjustment for the forward component at any time during the year
13 should an extraordinary event occur. Finally, short-term wholesale sales
14 revenue and 10 percent of annual net positive trading profits will be
15 credited to the fuel and purchased power costs.

16
17 **Q. Has the Company proposed any changes to the PPFAC in this rate**
18 **application?**

19 **A.** Yes. The Company is proposing to (1) eliminate the base fuel rate and
20 recover all fuel and purchased power costs through the PPFAC; (2)
21 develop multiple PPFAC rates to differentiate between on-peak and off-
22 peak, winter and summer voltage levels at which customers receive
23 service; (3) add several additional costs that would be recovered through

1 the PPFAC. These additional costs include any credit costs and broker
2 fees associated with power supply and procurement, lime costs
3 incremental to the amount included in test year and recovery of future
4 greenhouse gas costs. TEP has also proposed that 100 percent of the
5 SO₂ sales would be credited back to ratepayers if the Commission
6 approves the recovery of the incremental lime costs and finally, TEP has
7 proposed alternatives filing dates that were approved by the Commission
8 in the last rate case

9
10 **Q. Does RUCO agree with including these changes being proposed by**
11 **the Company?**

12 **A.** No. RUCO does not agree with making changes to the PPFAC at this time
13 for the following reasons:

14 Additional Costs to be Included in PPFAC

15 RUCO does not believe adding other costs to the PPFAC adjustor add
16 value to the ratepayer at this time. Costs related to broker fees and credit
17 expenses is immaterial (estimated at \$41,000 per Company⁶) and should
18 remain as part of O&M expenses in base rates. Incremental lime costs or
19 greenhouse gas costs are unknown at this time and the Company cannot
20 estimate what these costs will be. Broker fees and credit costs were not
21 approved by the Commission in TEP's last rate case and should not be
22 approved in this rate case.

⁶ See Company response to RUCO 3.23

Eliminate the Base Fuel Rate and Recover All Fuel and Purchased Power
Costs Through the PPFAC

The Commission has consistently found it in the public interest to have a portion of purchased power and fuel costs remain in base rates. Having a portion of fuel costs embedded in base rates creates an appropriate sharing of risk between both the shareholder and ratepayer. Under TEP's proposal, all risk is shifted to the ratepayer and there is no incentive to contain purchased power and fuel costs.

Q. Is TEP proposing additional adjustor mechanisms in this rate case submission?

A. Yes. The Company has proposed two new adjustor mechanisms. The first adjustor is a Lost Fixed Cost Recovery ("LFCR") mechanism and the second adjustor is an Environmental Compliance Adjustor. TEP is also proposing a new way to determine the energy efficiency program costs that will be recovered through TEP's existing DSMS.⁷

LOST FIXED COST RECOVERY MECHANISM – ("LFCR")

Q. Is TEP proposing a revenue decoupling mechanism?

A. Yes. TEP is requesting a LFCR to recover kWh sales that are lost as a result of complying with the Commission's EE Rules and REST Rules. The mechanism is designed to recover lost margins (non-fuel) due to

⁷ See Mr. Jones testimony page 56

1 reductions in kWh sales as a result of these programs. "The LFCR that
2 the Company is requesting is very similar to the Commission-approved
3 mechanisms in the APS and UNS Gas rate cases that were decided
4 earlier this year."⁸

5
6 **Q. Can you please explain how the LFCR will work as proposed by the**
7 **Company?**

8 **A.** In summary, the LFCR will work as follows:

- 9 (1) Quantify the lost level of kWh sales by class from EE programs;
10 (2) Quantify the lost level of kWh sales by class from DG and net metering
11 programs; (3) Adjust for any residential customers who have chosen to
12 contribute to the lost margins in the form of a fixed margin; (4) Price the
13 lost kWh sales in each class by the tail block margin rate if no Demand
14 Charge is in place for that rate class, or the per kWh rate plus one half of
15 the value of the Demand Charges for the class if Demand Charges are in
16 place for that class; (5) Compare the total dollars recovered from the last
17 year based on actual sales and determine if any over or under collection
18 has occurred; (6) Add any carryover from the prior year (amount that the
19 prior year's year-over-year increase was in excess of 2 percent of total
20 revenues) and any over or under collection from the prior year;
21 (7) Compare this total to the total estimated retail revenues for the
22 Company; (8) Carryover any amount the year over year increase is in

⁸ See Mr. Jones testimony page 57

1 excess of 2 percent; (9) Add in the prior year's allowed amount to the
2 allowed amount for the current year and divide this amount by the
3 forecasted total sales for the Company to determine the per kWh rate
4 application for the subsequent year; and (10) Submit these calculations
5 and the proposed tariffs to the Commission by May 15 or each year for an
6 anticipated effective date of July1.

7
8 **Q. Will TEP's LFCR mechanism provide an "opt-out" provision for**
9 **residential ratepayers?**

10 A. Yes. Residential ratepayers will have the option of choosing a fixed
11 monthly charge if they prefer not to be charged the variable rate based on
12 kWh usage. The Company has proposed a fixed monthly option of \$2.50
13 in months where usage is less than 2,000 kWh and will increase to \$6.50
14 for the months when usage exceeds 2,000 kWh.

15
16 **Q. Has TEP proposed an annual LFCR incremental cap that can be**
17 **passed through to affected ratepayers?**

18 A. Yes. The Company has proposed an annual 2 percent year over year cap
19 based on total retail sales to all customers.

1 **Q. Has the Company estimated the initial impact on ratepayers in the**
2 **LFCR mechanism is approved by the Commission?**

3 A. Yes. The Company has estimated that the initial impact on customer
4 billings will be \$0.004 per kWh effective July 1, 2014. (Lost margins are
5 estimated at \$36 million cumulative for years 2012 and 2013). If each
6 year were considered separately the adjustment would be \$0.002 kWh for
7 each individual year. Based on estimated total kWh for each year the
8 estimated rate payer affect will be within the 2 percent annual cap as
9 proposed.

10
11 **Q. What has been RUCO's position on adjustor mechanisms in past rate**
12 **applications?**

13 A. RUCO has opposed adjustor mechanisms in many rate applications in the
14 past. However, RUCO has also recommended that adjustors be approved
15 by the Commission when the circumstances warrant. For example,
16 RUCO agreed with the ACRM (Arsenic Cost Recovery Mechanism) when
17 the Federal Government changed the level of acceptable arsenic
18 contained in water. RUCO has agreed with a LFCR with an opt out in the
19 recent APS and UNS gas cases. Given that the Commission has
20 mandated that TEP comply with certain Energy Efficiency programs a
21 partial adjustor mechanism is appropriate provided that the customer have
22 the option to opt out.

1 **Q. Does RUCO agree with LFCR as proposed by TEP?**

2 A. RUCO agrees with the concept of the LFCR mechanism as proposed by
3 TEP with several changes. Again, RUCO has agreed to this limited form
4 of adjustor mechanism to meet the Commission's Energy Efficiency
5 Standard going forward because of the ratepayer's option to a fixed
6 monthly rate.

7
8 **Q. Does RUCO agree with the 2 percent cap on total company annual
9 revenues as proposed by the Company?**

10 A. No. RUCO believes that a 2 percent cap is high and a more appropriate
11 cap should be set a one percent, including the first year the adjustor goes
12 into place. A one percent cap has been approved by the Commission in
13 Decisions related to both APS and UNS Gas. Any amount in excess of
14 the one percent would be deferred for collection until the first future period
15 in which such costs would not cause the annual increase to exceed the
16 cap. Interest would be calculated on the deferred balance at the one-year
17 Nominal Treasury Constant Maturities rate contained in the Federal
18 Reserve Statistical Release H-15 and will be adjusted annually.

19
20 **Q. Does RUCO agree with the Company's "opt-out" provision as
21 proposed by the Company?**

22 A. RUCO agrees with an "opt-out" provision as it provides rate stability and
23 provides a better price signal to encourage reduced consumption.

1 However, RUCO believes that the proposed cost of the "opt-out" provision
2 presents an excessive burden to residential ratepayers. The average bill
3 for residential ratepayers is \$95.00 and compared to the lowest "opt-out"
4 provision of \$2.50, the increase to the average ratepayer, for the LFCR
5 mechanism would be approximately 2.6 percent. RUCO believes that a
6 maximum increase for the "opt-out" provision should be no more than one
7 percent.

8
9 **Q. Has RUCO reviewed the Plan of Administration (POA) as proposed**
10 **by TEP?**

11 **A.** Yes. RUCO has reviewed the POA and is proposing two changes. The
12 first change to the POA is the reporting dates to the Commission. RUCO
13 believes that submitting Compliance Reports by May 15th of each year
14 and expecting a turn around by July 1st doesn't provide the ACC Staff with
15 sufficient time for review. A later date in the year should be identified.

16 The second change that RUCO proposes to the POA is in Section 3,
17 LFCR ANNUAL INCREMENTAL CAP. The Company has proposed that
18 in the first year of implementing the adjustor the cap should be more than
19 the cap in future years. RUCO recommends that one percent be the cap
20 for all years in going forward including the initial year of implementation.

Energy Efficiency Resource Plan

Q. Can you please describe the Energy Efficiency Resource Plan, “EERP” that the Company is proposing?

A. TEP proposes the EERP as a “pilot program” to address the challenges the Company has faced implementing the EE programs.” The EERP is a 3 year plan period commencing August 1, 2013. It proposes annual EE budgets of approximately \$24 million to \$27 million per year. The EERP capitalizes the program costs of the Plan and amortizes recovery over a 4 year period. It applies a “Performance Incentive” to the amount spent on EE calculated as the authorized Rate of Return plus a 200 basis point premium added to the cost of equity and recovers it over the same 4 year period. The EERP creates a regulatory asset for recovery of the revenues spent on EE programs.

TEP’s proposal includes a Plan of Administration that includes a Societal Cost Test Template that TEP would use to determine cost effectiveness. It also authorizes TEP to select and administer DSM/EE programs it independently determines to be cost effective over the three years of the EERP consistent with the approved annual budget.

1 **Q. What is RUCO's proposal regarding TEP's EERP?**

2 A. RUCO opposes the EERP because it is not in the best interest of
3 ratepayers for the following reasons:

4 1. By capitalizing program costs and applying carrying costs, the
5 ratepayers may end up paying more for the EE programs than if these
6 costs were expensed.

7 2. The rate of return plus 200 basis points premium that is applied to
8 the DSM/EE program costs constitutes a performance incentive that is not
9 based on actual performance and rewards spending over the EE savings.

10 3. The 3 year term unnecessarily binds future Commissions to
11 spending levels and program structure.

12 4. The EERP eliminates significant Commission oversight.

13
14 RUCO will supplement its testimony on TEP's EERP when it files its direct
15 testimony on rate design.

16
17 **Q. Does this conclude your testimony?**

18 A. Yes.

ROBERT B. MEASE, CPA
Education and Professional Qualifications

EDUCATION

Bachelors Degree Business Administration / Accounting - Morris Harvey College.

Attended West Virginia School of Graduate Studies and studied Accounting and Public Administration

Attended numerous courses and seminars for Continuing Professional Educational purposes.

WORK EXPERIENCE

Controller

Knives of Alaska, Inc., Diamond Blade, LLC., and Alaska Expedition Company.

Financial Manager / CFO

All Saints Camp & Conference Center

Energy West, Inc.

Vice President, Controller

- Led team that succeeded in obtaining a \$1.5 million annual utility rate increase
- Coached accountants for proper communication techniques with Public Service Commission, supervised 9 professional accountants
- Developed financial models used to negotiate an \$18 million credit line
- Responsible for monthly, quarterly and annual financial statements for internal and external purposes, SEC filings on a quarterly and annual basis, quarterly presentations to Board of Directors and shareholders during annual meetings, coordinated annual audit
- Communication with senior management team, supervised accounting staff and resolved all accounting issues, reviewed expenditures related to capital projects
- Monitored natural gas prices and worked with senior buyers to ensure optimal price obtained

Junkermier, Clark, Campanella, Stevens

Consulting Staff

- Established a consulting practice that generated approximately \$160k the first year of existence
- Prepared business plan and projections for inclusion in clients financing documents
- Prepared written reports related to consulting engagements performed
- Developed models used in financing documents and made available for other personnel to use
- Performed Profit Enhancement engagements
- Participated during audit of large manufacturing client for two reporting years

Prior to 1999, held various positions: TMC Sales, Inc. as **Vice President / Controller**, with American Agri-Technology Corporation as **Vice President / CFO** and with Union Carbide Corporation as **Accounting Manager**. (**Union Carbide was a multi-national Fortune 500 Company that was purchased by Dow Chemical**)

PROFESSIONAL AFFILIATIONS

Member - Institute of Management Accountants

Member - American Institute of CPA's

Past Member –WV Society of CPA's and Montana Society of CPA's

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	6	RATE BASE ADJUSTMENT NO. 6 - ALLOWANCE FOR WORKING CAPITAL
RBM-5	1	TEST YEAR PLANT ADJUSTMENTS - RUCO ADJUSTMENTS
	2	BUILDING COSTS ALLOCATED TO AFFILIATES
RBM-6		ALLOWANCE FOR WORKING CAPITAL - LEAD / LAG STUDY
RBM-7		OPERATING INCOME STATEMENT
RBM-8	1 - 6	OPERATING INCOME - RUCO ADJUSTMENTS
RBM-9		OPERATING INCOME ADJUSTMENT NO. 1 - OTHER OPERATING INCOME (SPRINGERVILLE)
RBM-10		OPERATING INCOME ADJUSTMENT NO. 2 - DEPRECIATION EXPENSE
RBM-11	1 & 2	OPERATING INCOME ADJUSTMENT NO. 3 - PAYROLL EXPENSE
RBM-12		OPERATING INCOME ADJUSTMENT NO. 4 - INCENTIVE ADJUSTMENT
RBM-13		OPERATING INCOME ADJUSTMENT NO. 5 - PAYROLL TAX EXPENSE ADJUSTMENT
RBM-14		OPERATING INCOME ADJUSTMENT NO. 7 - OVERHAULS AND OUTAGE
RBM-15		INTENTIONALLY LEFT BLANK
RBM-16		OPERATING INCOME ADJUSTMENT NO. 9 - OFFICERS AND DIRECTORS INSURANCE
RBM-17		OPERATING INCOME ADJUSTMENT NO. 10 - LIME EXPENSE
RBM-18		OPERATING INCOME ADJUSTMENT NO. 11 - RATE CASE EXPENSE
RBM-19		OPERATING INCOME ADJUSTMENT NO. 12 - MISCELLANEOUS GENERAL EXPENSE
RBM-20		OPERATING INCOME ADJUSTMENT NO. 13 - PROPERTY TAX EXPENSE
RBM-21		OPERATING INCOME ADJUSTMENT NO. 14 - INCOME TAX EXPENSE
RBM-22		COST OF CAPITAL

**REVENUE REQUIREMENT
ACC JURISDICTIONAL**
(Thousands of Dollars)

LINE NO.	DESCRIPTION	(A) COMPANY ORIGINAL COST		(B) COMPANY RCND		(C) COMPANY FAIR VALUE		(D) RUCO ORIGINAL COST		(E) RUCO RCND		(F) RUCO FAIR VALUE	
1	Adjusted Rate Base	\$	1,519,073	\$	3,041,359	\$	2,280,216	\$	1,237,439	\$	2,583,004	\$	1,910,221
2													
3	Adjusted Operating Income (Loss)	\$	52,471	\$	52,471	\$	52,471	\$	81,454	\$	81,454	\$	81,454
4													
5	Current Rate Of Return (Line 3 / Line 1)		3.45%		1.73%		2.30%		6.58%		3.15%		4.26%
6													
7	Required Operating Income (Line 13 X Line 1)	\$	129,484	\$	129,484	\$	129,484	\$	97,612	\$	97,612	\$	97,612
8													
9	Weighted Average Cost of Capital		7.74%		7.74%		7.74%		7.28%		7.28%		7.28%
10													
11	Fair Value Adjustment		0.78%		-3.48%		-2.06%		0.61%		-3.50%		-2.17%
12													
13	Required Rate of Return		8.52%		4.26%		5.68%		7.89%		3.78%		5.11%
14													
15	Operating Income Deficiency (Line 7 - Line 3)	\$	77,013	\$	77,013	\$	77,013	\$	16,158	\$	16,158	\$	16,158
16													
17	Gross Revenue Conversion Factor (Schedule RBM-1, page 2)		1.6590		1.6590		1.6590		1.6574		1.6574		1.6574
18													
19	Increase In Gross Revenue Requirement (Line 15 X Line 17)	\$	127,765	\$	127,765	\$	127,765	\$	26,781	\$	26,781	\$	26,781
20													
21	Adjusted Test Year Revenue	\$	836,938	\$	836,938	\$	836,938	\$	873,082	\$	873,082	\$	873,082
22													
23	Proposed Annual Revenue Requirement (Line 19 + Line 21)	\$	964,703	\$	964,703	\$	964,703	\$	899,863	\$	899,863	\$	899,863
24													
25	Required Percentage Increase In Revenue (Line 19 / Line 21)		15.27%		15.27%		15.27%		3.07%		3.07%		3.07%
26													
27	Rate Of Return On Common Equity		10.75%		10.75%		10.75%		10.00%		10.00%		10.00%

References:

Columns (A) Thru (C): Company Schedule A-1, C-1 and D-1
Column (D): Schedules RBM-1, Page 2, RBM-2, RBM-7 and RBM-22
Column (E): Schedule RBM-2, Column (F)
Column (F): Average of Column (D) + Column (E)

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	REFERENCE	(A)
	CALCULATION OF GROSS REVENUE CONVERSION FACTOR:		
1	Revenue		100.00%
2	Less: Uncollectibles	Per Company Workpapers	0.25%
3	Subtotal	Line 1 - Line 2	99.75%
4	Less: Combined Federal And State Tax Rate	Line 16	39.42%
5	Subtotal	Line 3 - Line 4	60.34%
6	Revenue Conversion Factor	Line 1 / Line 5	1.6574
7			
8	CALCULATION OF EFFECTIVE TAX RATE:		
9	Arizona Taxable Income		100.0%
10	Arizona State Income Tax Rate		6.968%
11	Federal Taxable Income	Line 9 - Line 10	93.0%
12	Applicable Federal Income Tax Rate		35.0%
13	Effective Federal Income Tax Rate	Line 11 X Line 12	32.5%
14	Subtotal	Line 10 + Line 13	39.5%
15	Revenue Less Uncollectibles	Line 3	99.8%
16	Combined Federal And State Income Tax Rate	Line 14 X Line 15	39.4%
17			
18			
19			
20			
21			
22	Operating Income Deficiency	Sch RBM-1 Ln 15	\$ 16,158
23	Gross Income Conversion Fzctor	Column (A) Ln 6	1.6574
24	Increase in Gross Revenue		\$ 26,781
25			
26	Increase in Income Tax Expense	Ln 24 - Ln 22	\$ 10,623
27			
28			

**FAIR VALUE RATE BASE
ACC JURISDICTIONAL**
(Thousands of Dollars)

LINE NO.	DESCRIPTION	(A) COMPANY OCRB	(B) COMPANY RCND	(C) COMPANY FVRB	(D) OCRB/RCND % DIFF.	(E) RUCO OCRB	(F) RUCO RCND	(G) RUCO FVRB
1	Gross Utility Plant In Service	\$ 3,199,453	\$ 6,655,502	\$ 4,927,478	208.02%	\$ 2,969,301	\$ 6,176,741	\$ 4,573,021
2	Accumulated Depreciation	(1,411,639)	(3,005,492)	(2,208,566)	212.91%	(1,277,931)	(2,720,816)	(1,999,373)
3	Net Utility Plant In Service	\$ 1,787,814	\$ 3,650,010	\$ 2,718,912		\$ 1,691,371	\$ 3,455,924	\$ 2,573,647
4								
5	Plant Held For Future Use	\$ -	\$ -	\$ -	100.00%	\$ -	\$ -	\$ -
6								
7	Total Net Utility Plant	\$ 1,787,814	\$ 3,650,010	\$ 2,718,912		\$ 1,691,371	\$ 3,455,924	\$ 2,573,647
8								
9	Deductions:							
10	Cust. Advances For Const.	\$ (8,924)	\$ (13,182)	\$ (11,053)	147.71%	\$ (8,924)	\$ (13,182)	\$ (11,053)
11	Customer Deposits	(23,743)	(23,743)	(23,743)	100.00%	(23,743)	(23,743)	(23,743)
12	Def'd Credit - Cont'd Plt & Retm't Oblig.	(15,832)	(15,773)	(15,803)	99.63%	(15,832)	(15,773)	(15,803)
13	Acc. Deferred Income Taxes	(284,654)	(620,365)	(452,510)	217.94%	(351,705)	(766,494)	(559,100)
14	Total Deductions	\$ (333,153)	\$ (673,063)	\$ (503,108)		\$ (400,204)	\$ (819,192)	\$ (609,698)
15								
16	Allowance - Working Capital	\$ 53,323	\$ 53,323	\$ 53,323	100.00%	\$ 49,057	\$ 49,057	\$ 49,057
17								
18	Regulatory Assets	\$ 11,089	\$ 11,089	\$ 11,089	100.00%	\$ -	\$ -	\$ -
19								
20	Regulatory Liability	\$ -	\$ -	\$ -	100.00%	\$ (102,785)	\$ (102,785)	\$ (102,785)
21								
22								
23	TOTAL TEST YEAR RATE BASE	\$ 1,519,073	\$ 3,041,359	\$ 2,280,216		\$ 1,237,439	\$ 2,583,004	\$ 1,910,221

References:

Columns (A) (B) (C): Company Schedule B-1
Column (D): Column (B) / Column (A)
Column (E): Schedule RBM-3 page 1, Column (C)
Column (F): Column (D) X Column (E)
Column (G): Average Of Column (E) + Column (F)

ORIGINAL COST RATE BASE - ACC JURISDICTIONAL

LINE NO.	DESCRIPTION	(A) COMPANY FILED AS OCRB	(B) RUCO ADJUSTMENTS	(C) RUCO ADJUSTED AS OCRB
1	Gross Utility Plant In Service	\$ 3,199,454	\$ (230,153)	\$ 2,969,301
2	Accumulated Depreciation	(1,411,639)	133,708	(1,277,931)
3	Net Utility Plant In Service	<u>\$ 1,787,815</u>	<u>\$ (96,444)</u>	<u>\$ 1,691,371</u>
4				
5	Plant Held For Future Use	\$ -	\$ -	\$ -
6				
7	Total Net Utility Plant	<u>\$ 1,787,815</u>	<u>\$ (96,444)</u>	<u>\$ 1,691,371</u>
8				
9	Deductions:			
10	Cust. Advances For Const.	\$ (8,924)	\$ -	\$ (8,924)
11	Customer Deposits	(23,743)	-	(23,743)
12	Def'd Credit - Cont'd Plt & Retm't Oblig.	(15,832)	-	(15,832)
13	Acc. Deferred Income Taxes	(284,654)	(67,051)	(351,705)
14	Total Deductions	<u>\$ (333,153)</u>	<u>\$ (67,051)</u>	<u>\$ (400,204)</u>
15				
16	Allowance - Working Capital	\$ 53,323	\$ (4,266)	\$ 49,057
17				
18	Regulatory Assets	\$ 11,089	\$ (11,089)	\$ -
19				
20	Regulatory Liability	\$ -	\$ (102,785)	\$ (102,785)
21				
22				
23	TOTAL OCRB	<u>\$ 1,519,074</u>	<u>\$ (281,635)</u>	<u>\$ 1,237,439</u>

References:

Column (A): - Company Schedule B-2. Also see RBM-3 page 2 Col. A
Column (B): - RUCO Adjustments (See RBM-3 page 2, Columns (B) thru (G))
Column (C): - Sum Of Columns (A) and (B)

SUMMARY ORIGINAL COST RATE BASE - RUCO ADJUSTMENTS
(Thousands of Dollars)

LINE NO.	DESCRIPTION	(A) COMPANY FILED AS OCRB	(B) Adjustment No. 1 Gross Utility Plant	(C) Adjustment No. 2 Accumulated Depreciation	(D) Adjustment No. 3 Accu Deferred Income Taxes	(E) Adjustment No. 4 Regulatory Liabilities	(F) Adjustment No. 5 Sahuarita-Nogales Trans. Line	(G) Adjustment No. 5	(H) RUCO ADJUSTED AS OCRB
1	Gross Utility Plant In Service	\$ 3,199,454	\$ (230,153)	-	-	\$ -	\$ -	-	\$ 2,969,301
2	Accumulated Depreciation	(1,411,639)	-	133,708	-	-	-	-	(1,277,931)
3	Net Utility Plant In Service	\$ 1,787,815	\$ (230,153)	\$ 133,708	\$ -	\$ -	\$ -	\$ -	\$ 1,691,371
4									
5	Plant Held For Future Use	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
6									
7	Total Net Utility Plant	\$ 1,787,815	\$ (230,153)	\$ 133,708	\$ -	\$ -	\$ -	\$ -	\$ 1,691,371
8									
9	Deductions:								
10	Cust. Advances For Const.	\$ (8,924)	\$ -	\$ -	\$ -	\$ -	\$ -	-	\$ (8,924)
11	Customer Deposits	(23,743)	-	-	-	-	-	-	(23,743)
12	Defrd Credit - Plt & Retm't	(15,832)	-	-	-	-	-	-	(15,832)
13	Acc. Deferred Income Taxes	(284,654)	-	-	(67,051)	-	-	-	(351,705)
14	Total Deductions	\$ (333,153)	\$ -	\$ -	\$ (67,051)	\$ -	\$ -	\$ -	\$ (400,204)
15									
16	Allowance - Working Capital	\$ 53,323	\$ -	\$ -	\$ -	\$ -	\$ -	(4,266)	\$ 49,057
17									
18	Regulatory Assets	\$ 11,089	\$ -	\$ -	\$ -	\$ -	(11,089)	-	\$ -
19									
20	Regulatory Liability	\$ -	\$ -	\$ -	\$ -	\$ (102,785)	\$ -	-	\$ (102,785)
21									
22									
23	TOTAL OCRB	\$ 1,519,074	\$ (230,153)	\$ 133,708	\$ (67,051)	\$ (102,785)	\$ (11,089)	\$ (4,266)	\$ 1,237,439

References:

Column (A): Company Schedule B-1
Columns (B) Thru (G): RUCO Rate Base Adjustment Nos. 1 thru 5
Column (H): Sum Of Columns (A) Through (G)

ORIGINAL COST RATE BASE STATEMENT WITH COMPANY ADJUSTMENTS

LINE NO.	DESCRIPTION	(Thousands of Dollars)										
		(A) COMPANY OCRB PRIOR TO ADJUSTMENTS	(B) Sahuarita-Nogales Transmission Line	(C) LH Improvements Unisource Energy Headquarters	(D) Post Test Year	(E) Post Test Yr Renewable	(F) Delayed Plant	(G) Acc Deferred ITC	(H) Acc Deferred Income Taxes	(I) Working Capital	(J) Total Adjustments	(K) COMPANY OCRB AFTER ADJUSTMENTS
1	Gross Utility Plant In Service	\$ 3,156,974	\$ -	\$ (2,059)	\$ 20,489	\$ 18,413	\$ 7,657	\$ -	\$ -	\$ -	\$ 42,480	\$ 3,199,454
2	Accumulated Depreciation	(1,412,197)	-	(1,294)	28	702	6	-	-	-	-	(558)
3	Net Utility Plant In Service	\$ 1,744,777	\$ -	\$ (765)	\$ 20,441	\$ 15,711	\$ 7,651	\$ -	\$ -	\$ -	\$ 43,038	\$ 1,411,639
4												
5	Plant Held For Future Use	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
6												
7	Total Net Utility Plant	\$ 1,744,777	\$ -	\$ (765)	\$ 20,441	\$ 15,711	\$ 7,651	\$ -	\$ -	\$ -	\$ 43,038	\$ 1,411,639
8												
9	Deductions:											
10	Cost Advances For Const.	\$ (8,924)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (8,924)
11	Customer Deposits	(23,743)	-	-	-	-	-	-	-	-	-	(23,743)
12	Debt Credit - Cont'd Pft & Reim't Oblig.	(14,227)	-	-	-	-	-	(1,605)	-	-	(1,605)	(15,832)
13	Acc. Deferred Income Taxes	(158,005)	-	-	-	-	-	-	(126,649)	-	(126,649)	(284,654)
14	Total Deductions	\$ (204,899)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (1,605)	\$ (126,649)	\$ -	\$ (128,254)	\$ (333,153)
15												
16	Allowance - Working Capital	\$ 88,064	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (34,761)	\$ (34,761)	\$ 53,323
17												
18	Regulatory Assets	\$ -	\$ 11,089	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,089	\$ 11,089
19												
20	Regulatory Liability	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
21												
22												
23	TOTAL OCRB	\$ 1,527,562	\$ 11,089	\$ (765)	\$ 20,441	\$ 15,711	\$ 7,651	\$ (1,605)	\$ (126,649)	\$ (34,761)	\$ (108,888)	\$ 1,519,074

References:
Column (A) thru Column (K): - Company Schedule B-2

RATE BASE ADJUSTMENT NO. 1
GROSS UTILITY PLANT IN SERVICE
(Thousands of Dollars)

Line No.	DESCRIPTION	(A) COMPANY PROPOSED	(B) RUCO ADJUSTMENT	(C) RUCO AS ADJUSTED
1	Gross Utility Plant in Service	\$ 3,199,454	\$ (230,153)	2,969,301
2				
3				
4				
5				
6				
7				
8	Gross Utility Plant Reduction	\$ 162,181,320	See RBM-5 page 1 Ln 44 and FWR Testimony	
9				
10	ACC Jurisdictional Costs of New Building	67,971,337		
11				
12	TOTAL ADJUSTMENTS	\$ 230,152,657		

References:

Column (A) Ln 1 - Company Workpapers
Column (A) Ln 10 - Company Response to Staff Data Request 23.6

**RATE BASE ADJUSTMENT NO. 2
ACCUMULATED DEPRECIATION**

Line No.	DESCRIPTION	(A) COMPANY PROPOSED	(B) RUCO ADJUSTMENT	(C) RUCO AS ADJUSTED
1	Accumulated Depreciation	\$ (1,411,638,679)	\$ 133,708,325	\$ (1,277,930,354)
2				
3				
4				
5				
6				
7				
8				
9				
10				
11	<u>RUCO Proposed Adjustments</u>			
12				
13	Reduction of A/D due to disallowance of plant in service		\$ 4,557,838	RBM-5 page 1, Ln 44
14	Reduction of A/D due to depreciation expense increase			
15	resulting from reclassification of plant		3,922,727	RBM-5 page 1, Ln 36
16	Reduction of A/D due to disallowance of new office building		1,885,760	RBM-5 page 2, Ln 17
17	Reduction of A/D due to the return of depreciation			
18	reserve to ratepayers		20,557,214	RBM-4 page 4, Ln 10
19	Reclassification of A/D to Regulatory Liability			
20	(\$123,342,000 - \$20,557,000)		<u>102,784,786</u>	RBM-4 page 4, Ln 8
21				
22				
23			<u>\$ 133,708,325</u>	
24				

References:
Column (A) Company Schedule B-1

RATE BASE ADJUSTMENT NO. 3
ACCUMULATED DEFERRED INCOME TAXES

Line No.	DESCRIPTION	(A) COMPANY PROPOSED	(B) RUCO ADJUSTMENT	(C) RUCO AS ADJUSTED
1	Accumulated Deferred Income Taxes	\$ (284,653,882)	\$ (67,051,372)	\$ (351,705,254)
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12	<u>Net Operating Losses Carry Forwards (NOL)</u>			
13				
14	FED & NM NOL CARRYFORWARD	\$ 82,071,149		
15	Post Test Year Plant NOL	3,161,209		
16	Delayed Plant Adj. NOL	2,722,567		
17	AZ NOL Carryforward	<u>1,256,587</u>		
18				
19	Deferred Tax Asset Resulting from NOL	\$ 89,211,512		
20				
21	ACC Jurisdictional	<u>75.16%</u>		
22				
23	RUCO ADJUSTMENT	<u>\$ 67,051,372</u>		
24				

References:

Column (A) Company Schedules

Column (A) Lns 14 thru 23 Company URD-1 Schedule Attachments and Workpapers

**RATE BASE ADJUSTMENT NO. 4
REGULATORY LIABILITIES**

Line No.	Acct	DESCRIPTION	(A) COMPANY PROPOSED	(B) RUCO ADJUSTMENT	(C) RUCO AS ADJUSTED
1	254	Regulatory Liabilities	\$ -	\$ (102,784,786)	\$ (102,784,786)
2					
3					
4					
5					
6					
7		RUCO's proposed reduction in Accumulated Depreciation			
8		due to difference in book A/D and theoretical depreciation		123,342,000	FWR Testimony
9					
10		Six year amortization		20,557,000	FWR Testimony
11					
12		Remaining Unamortized Regulatory Liability		\$ 102,785,000	
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					

**RATE BASE ADJUSTMENT NO. 5
REGULATORY ASSETS**

Line No.	Acct	DESCRIPTION	(A) COMPANY PROPOSED	(B) RUCO ADJUSTMENT	(C) RUCO AS ADJUSTED
1	182.3	Regulatory Assets	\$ 11,088,732	\$ (11,088,732)	\$ -
2					
3					
4					
5		Pre-Construction Costs	\$ 8,947,914		
6		Land and Land Rights	2,140,815		
7			<u>\$ 11,088,729</u>		
8					
9					
10					
11		RUCO is proposing that the total cost of the Sahuarita Nogales			
12		Transmission Line be deleted from rate base. The total cost included in			
13		rate base related to the line is \$11,088,732 which includes pre-construction			
14		cost as well as land and and land rights.			
15					
16					
17					
18					
19		The Company is proposing that the pre-construction costs of the Sahuarita			
20		Nogales Transmission Line be amortized over a three year period or			
21		\$2,982,638 per year.			
22					
23					

RATE BASE ADJUSTMENT NO. 6
ALLOWANCE FOR WORKING CAPITAL
(Thousands of Dollars)

			(A)
LINE NO.	DESCRIPTION	REFERENCE	AMOUNT
1	Cash Working Capital Per TEP	TEP SCH. B-5, Page 1	\$ (19,359)
2	Cash Working Capital Per RUCO	RBM-6	(23,625)
3	Adjustment	Line 2 - Line 1	\$ (4,266)
4			
5	Fuel Inventory Per TEP	TEP SCH. B-5, Page 1	\$ 25,307
6	Fuel Inventory Per RUCO	TEP SCH. B-5, Page 1	25,307
7	Adjustment	Line 6 - Line 5	\$ -
8			
9	Materials And Supplies Per TEP	TEP SCH. B-5, Page 1	\$ 42,837
10	Materials And Supplies Per RUCO	TEP SCH. B-5, Page 1	42,837
11	Adjustment	Line 10 - Line 9	\$ -
12			
13	Prepayments Per TEP	TEP SCH. B-5, Page 1	\$ 4,538
14	Prepayments Per RUCO	TEP SCH. B-5, Page 1	4,538
15	Adjustment	Line 14 - Line 13	\$ -
16			
17	TOTAL ADJUSTMENT - WORKING CAPITAL	Sum Lines 3, 7, 11, 15)	\$ (4,266)
18			
19			
20			
21			
22			

TEST YEAR PLANT ADJUSTMENTS

	2006		2011		RUCO ADJUSTED 2011		DEPRECIATION EXPENSE	
	Acct.	Gross Plant	Depr Reserve	Net Plant	Gross Plant	Depr Reserve	Net Plant	Depr Rate
1	310	\$ 4,603	\$ 2,243	\$ 2,360	\$ 4,603	\$ 3,874	\$ 729	5.34%
2	311	111,087	62,031	49,056	168,247	97,520	70,727	5.16%
3	312	652,151	332,664	319,487	1,020,823	489,561	531,062	3.87%
4	314	206,960	101,243	105,717	300,048	140,860	159,188	3.79%
5	315	71,511	38,162	33,329	116,382	59,751	56,631	3.24%
6	316	19,281	10,338	8,943	22,314	13,826	8,488	3.88%
7	317	70	56	14	-	-	-	-
8								
9								
10		\$ 1,065,663	\$ 546,757	\$ 518,906	\$ 1,632,217	\$ 805,392	\$ 826,825	
11								
12								
13	360	\$ 7,991	\$ 2,895	\$ 5,096	\$ 8,018	\$ 3,543	\$ 4,475	1.43%
14	361	6,282	1,745	4,537	11,107	2,122	8,985	1.63%
15	362	95,451	63,750	31,701	138,343	42,910	95,433	1.46%
16	364	112,985	80,761	32,224	159,393	51,948	107,445	1.63%
17	365	106,758	59,379	47,379	152,886	55,045	97,841	1.47%
18	366	49,342	15,411	33,931	53,276	23,337	29,939	1.42%
19	367	213,374	46,664	166,710	268,486	104,292	164,194	1.89%
20	368	77,837	35,429	42,408	103,782	47,865	55,917	1.84%
21	368	125,291	44,936	80,355	164,679	71,693	92,986	2.52%
22	369	12,050	4,425	7,625	15,071	5,414	9,657	1.62%
23	369	79,968	38,184	41,784	98,682	33,223	65,459	1.50%
24	370	32,881	11,285	21,596	45,714	14,857	30,857	2.99%
25	373	9,334	5,835	3,499	11,173	4,814	6,359	1.74%
26	374	216	183	33	-	-	-	0.00%
27								
28		\$ 929,760	\$ 410,882	\$ 518,878	\$ 1,230,410	\$ 461,063	\$ 769,347	
29								
30	Total	\$ 1,995,423	\$ 957,639	\$ 1,037,784	\$ 2,862,627	\$ 1,268,455	\$ 1,596,172	
31								
32								
33								
34								
35								
36								
37								
38								
39								
40								
41								
42								
43								
44								

ADJUSTMENT TO GROSS UTILITY PLANT

Steam Plant as Submitted by Company	\$ 1,632,217
Steam Plant Recomputed by RUCO	\$ 1,558,201
Decrease in Gross Value Steam Plant	\$ 74,016
Distribution Plant as Submitted by Company	\$ 1,230,410
Distribution Plant Recomputed by RUCO	\$ 1,142,245
Decrease in Gross Value Dist. Plant	\$ 88,165
Total Reduction in Plant	\$ 162,181,320

ACCUMULATED DEPRECIATION ADJUSTMENT

Steam Plant as Submitted by Company	\$ 805,392
Steam Plant Recomputed by RUCO	\$ 778,956
Decrease in A/D - Steam Plant	\$ 26,436
Distribution Plant as Submitted by Company	\$ 461,063
Distribution Plant Recomputed by RUCO	\$ 492,056
Decrease in A/D - Distribution Plant	\$ (30,993)
Total Reduction in A/D	\$ (4,556,838)

DEPRECIATION EXPENSE ADJUSTMENT

Depreciation Expense Company	\$ 22,288
Depreciation Expense RUCO	\$ 20,667
Difference	\$ (1,621)
Total	\$ 73,069
	\$ 69,146
	\$ (3,923)

BUILDING COSTS ALLOCATED TO AFFILIATES

	(A)			
1	Investment in Land-downtown HQ	\$	8,549,938	
2	Investment in Office Facilities		71,430,308	
3	Investment in Furniture & Equipment		50,023	
4	Less: Accumulated Depreciation		(901,025)	
5	Less: Accumulated Depreciation		(1,176,718)	
6	Less: Accumulated Deferred Income Taxes		-	
7	Net Investment in Office Facilities		77,952,526	
8	Multiplied by: Current Regulated Rate of Return		8.03%	
9				
10	Required Return on Office Facilities and F&E		6,259,588	
11				
12	Add:			
13	O&M Expenses Applicable to Office Facilities and F&E		2,100,000	RBM-19
14	PC/Lan Expenses		-	
15	Property Taxes Applicable to Office Facilities		1,000,000	RBM-20
16	Insurance Costs Applicable to Office Facilities		-	
17	Book Depreciation on Office Facilities		1,885,760	RBM-10
18	Income Taxes on Equity Portion of Return **		2,225,597	
19				
20	Revenue Requirement for Office Facilities and F&E		13,470,945	232,835 57.86 \$ 13,470,945
21				
22	Divided by: Number of Employees - Excluding SPG		539	25.00 \$ 5,820,875
23				
24	Cost Per Employee	\$	24,992	Calculated IncomeAffects of Bldg \$ (7,650,070)
25				
26	Divided by: Annual Labor Hrs.		2,080	
27				
28	Facilities Cost Per Hour	\$	12.02	
29				
30	**			
31	Net Investment in Office Facilities	\$	77,952,526	
32	Regulated Rate of Return - Equity Component		4.36%	
33	Equity Component of Return on Office Facilities		3,398,730	
34	Divide by 1- Combined Tax Rate		60.4291%	
35			5,624,327	
36	Multiply by Combined Tax Rate		39.5709%	
37	Income Taxes on Equity Portion of Return	\$	2,225,597	
38				

References:
Company Data Response
See FWR Testimony

ALLOWANCE FOR WORKING CAPITAL
LEAD/LAG DAY SUMMARY

LINE NO.	DESCRIPTION	(A) COMPANY EXPENSES AS FILED	(B) RUCO Adj	(C) RUCO Adjusted Results	(D) Revenue Lag Days	(E) Exp Lag Days	(F) Net Lag Days	(G) Lead Lag Factor	(H) Cash Working Capital Requirements
	OPERATING EXPENSES								
	Non-Cash Expenses:								
1	Bad Debts Expense	\$ 2,080,293	\$ (2,080,293)	-					\$ -
2	Depreciation	119,580,496	\$ (119,580,496)	-					-
3	Amortization	3,481,610	\$ (3,481,610)	-					-
4	Deferred Income Taxes	12,803,088	\$ (12,803,088)	-					-
5	Total Non-Cash Expenses	\$ 137,945,487	\$ (137,945,487)	\$ -					\$ -
	Other Operating Expenses:								
6	Salaries & Wages	\$ 71,991,108	\$ (1,470,721)	\$ 70,520,387	36.47	10.46	26.01	7.13%	\$ 5,025,302
7	Incentive Pay	6,247,890	(2,530,620)	3,717,270	36.47	259.50	(223.03)	-61.10%	(2,271,404)
8	Fuel Expense	285,386,416	-	285,386,416	36.47	29.50	6.97	1.91%	5,449,708
9	Lease Expense	101,812,888	-	101,812,888	36.47	94.33	(57.86)	-15.85%	(16,139,435)
10	Remote Generating Plant O & M	47,385,627	(4,883,016)	42,502,611	36.47	(6.90)	43.37	11.88%	5,050,242
11	Office Supplies and Expenses	9,594,745	-	9,594,745	36.47	12.46	24.01	6.58%	631,150
12	Outside Services	10,520,391	-	10,520,391	36.47	44.51	(8.04)	-2.20%	(231,737)
13	Property Insurance	2,271,746	(289,320)	1,982,426	36.47	-	36.47	9.99%	198,080
14	Injuries and Damages	2,278,506	-	2,278,506	36.47	(13.27)	49.74	13.63%	310,501
15	Pensions and Benefits	17,449,591	-	17,449,591	36.47	13.03	23.44	6.42%	1,120,598
16	Misc. General Expenses	4,285,497	(2,139,016)	2,146,481	36.47	(2.00)	38.47	10.54%	226,233
17	Rents	375,864	-	375,864	36.47	(40.51)	76.98	21.09%	79,271
18	Property Taxes	39,148,092	(3,110,547)	36,037,545	36.47	213.78	(177.31)	-48.58%	(17,506,348)
19	Payroll Taxes	7,830,466	\$ (272,631)	7,557,835	36.47	16.53	19.94	5.46%	412,886
20	Current Income Taxes	7,016	22,763	29,779	36.47	62.05	(25.58)	-7.01%	(2,087)
21	Other Taxes	46,168	-	46,168	36.47	91.37	(54.90)	-15.04%	(6,944)
22	Interest on Customer Deposits	(2,439)	-	(2,439)	36.47	182.50	(146.03)	-40.01%	976
23	Other Operations and Maint.	63,312,707	(149,998)	63,162,709	36.47	11.99	24.48	6.71%	4,236,228
24	Total Other Operating Exp.	\$ 669,942,279	\$ (14,823,108)	\$ 655,119,171					\$ (13,416,781)
25									
26	Other Cash Working Capital Elements:								
27	Interest on Long-Term Debt	\$ 54,838,713	\$ -	54,838,713	36.47	86.20	(49.73)	-13.62%	\$ (7,471,587)
28	Rev. Taxes and Assessments	85,440,494	-	85,440,494	36.47	48.16	(11.69)	-3.20%	\$ (2,736,437)
29	Total Other Cash Working Cap.	\$ 140,279,207	\$ -	\$ 140,279,207					\$ (10,208,023)
30									
31	TOTAL CASH WORKING CAPITAL	\$ 948,166,973		\$ 795,398,378					\$ (23,624,804)
32									
33									
34									
35									
36	References:								
37	Column (A): - Company Schedule B-5								
38	Column (B): RUCO Operating Income Adjustments (See RBM-8)								
39	Column (C): Column (A) + (B)								
40	Column (D): Company Schedule B-5, Page 3								
41	Column (E): Column (C) X Column (D)								

		OPERATING INCOME STATEMENT				
		(Thousands of Dollars)				
LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) RUCO TEST YEAR ADJM'TS	(C) RUCO TEST YEAR AS ADJ'D	(E) RUCO PROPOSED ACC JURID'L	(F) RUCO RECOM'D ACC JURID'L
1	Operating Revenues:					
2	Electric Retail Revenues	\$ 836,938	\$ -	\$ 836,938	\$ 26,781	\$ 863,719
3	Sales for Resale	-	-	-	-	-
4	Other Operating Revenue	\$ 29,183	6,961	36,144	-	\$ 36,144
5						
6	TOTAL OPERATING REVENUES	\$ 866,121	\$ 6,961	\$ 873,082	\$ 26,781	\$ 899,863
7						
8	Operating Expenses:					
9	Fuel, Purchased Power and Trans	\$ 292,188	(6,692)	\$ 285,496		\$ 285,496
10	Other Operations and Maintenance Exp	381,988	(8,107)	373,881		373,881
11	Depreciation and Amortization	97,311	(26,366)	70,945		70,945
12	Taxes Other than Income Taxes	35,142	(3,383)	31,759		31,759
13	Income Taxes	7,019	22,525	29,544	10,623	40,167
14	Rounding Differences	-	2	2		2
15	TOTAL OPERATING EXPENSES	\$ 813,648	\$ (22,019)	\$ 791,628	\$ 10,623	\$ 802,251
16						
17	OPERATING INCOME (LOSS)	\$ 52,473	\$ 28,980	\$ 81,454	\$ 16,158	\$ 97,612

References:

Column (A) Per Company Filing
Column (B) Schedule RBM-8
Column (E) Schedule RBM-1 page 2

References:

Column (A): Company Schedule C-1
Column (B): Testimonies, RLM & MDC And Schedule RLM-8, Pages 1 Thru 6
Column (C): Column (A) + Column (B)
Column (D): Column (C) X Jurisdictional Factor
Column (E): See Schedule RLM-1
Column (F): Column (D) + Column (E)

OPERATING INCOME -- RUCO ADJUSTMENTS

[illegible]

OPERATING INCOME – RUCO ADJUSTMENTS

LINE	FERC	ACCT	DESCRIPTION	(A) COMPANY AS FILED	(B) Adjustment 1 Springville Rental Income	(C) Adjustment 2 Depreciation	(D) Adjustment 3 Payroll Expense	(E) Adjustment 4 Incentive Compensation	(F) Adjustment 5 Payroll Tax Expense	(G) Adjustment 6 Nogales Amortization
41										
42			Transmission Non-EHV (138 KV & Below)							
43	560		Operation Supervision & Engineering	\$	\$	\$	\$	\$	\$	\$
44	561	561.1 - 561.8	Load Dispatch & Various							
45	562		Station Expenses							
46	563		Overhead Line Expenses							
47	564		Miscellaneous Transmission Expenses							
48	565		Maintenance of Station Equipment							
49	566		Maint. of Structures & Equip. (Hard & Software & Equip)							
50	569 & 569.1-569.3		Maintenance of Station Equipment							
51	570		Maintenance of Overhead Lines							
52	571		Maintenance of Miscellaneous Transmission Plant							
53	573		Total Transmission Non EHV (138 KN & Below)							
54			Total Transmission EHV (345kv & Above) Expense							
55	560		Operation Supervision & Engineering	\$	\$	\$	\$	\$	\$	\$
56	561	561.1 - 561.8	Load Dispatch - Monitor & Operation Transmission System							
57	562		Station Expenses							
58	563		Overhead Line Expenses							
59	565		Transmission of Electricity by Others - PPFAC Eligible	90,028,058						
60	566		Miscellaneous Transmission Expenses							
61	567		Rents							
62	568		Maintenance Supervision & Engineering							
63	569 & 569.1 - 569.3		Maint. of Structures & Computers (Hard & Software & Equip)							
64	570		Maintenance of Station Equipment							
65	571		Maintenance of Overhead Lines							
66	573		Maintenance of Miscellaneous Transmission Plant							
67			Total Transmission EHV (345kv & Above) Expense	90,028,058						
68										
69										
70										
71			Distribution Expense							
72	560		Operation Supervision & Engineering	\$	\$	\$	\$	\$	\$	\$
73	561		Load Dispatching	1,321,680			(19,065)	(47,590)		
74	562		Station Expenses	592,834			(9,604)			
75	563		Overhead Line Expenses	230,240			(1,388)			
76	564		Underground Line Expenses	627,561			(7,850)			
77	565		Street Lighting & Signal System Expenses	141,291			(2,765)			
78	566		Meter Expenses	172,310			(100)			
79	567		Customer Installations Expense	2,287,037			(22,963)			
80	568		Miscellaneous Distribution Expenses	135,368			(2,580)			
81	569		Rents	9,784,316			(70,533)	(192,022)		
82	570		Maintenance Supervision & Engineering	867,232			(12,308)			
83	571		Maintenance of Structures	780,444						
84	573		Maintenance of Station Equipment	1,088,984			(10,821)			
85	593		Maintenance of Overhead Lines	925,427			(13,564)			
86	594		Maintenance of Underground Lines	165,484			(1,497)			
87	595		Maintenance of Line Transformers	494,257			(5,842)			
88	596		Maintenance of Street Lighting & Signal Systems							
89	597		Maintenance of Meters	116,105			(2,249)			
90	598		Maintenance of Miscellaneous Distribution Plant	252,158			(1,057)	(30,364)		
91	407.3		Regulatory Asset Amortization	2,882,638						(2,982,638)
92			Total Distribution Expense	22,965,416			(182,797)	(269,975)		(2,982,638)

OPERATING INCOME -- RUCC ADJUSTMENTS

LINE	FERC	ACCT	DESCRIPTION	(A) COMPANY AS FILED	(B) Adjustment 1 Spring/Summer Rental Income	(C) Adjustment 2 Depreciation	(D) Adjustment 3 Payroll Expense	(E) Adjustment 4 Incentive Compensation	(F) Adjustment 5 Payroll Tax Expense	(G) Adjustment 6 Nogales Amortization
93			Customer Account Expense							
94		901	Supervision	\$	\$					
95		902	Meter Reading Expenses	3,037,059						
96		903	Customer Records & Collection Expenses	13,230,911						
97		904	Uncollectible Accounts	2,080,293			(144,574)	(202,140)		
98		905	Miscellaneous Customer Accounts Expenses							
99		906	Customer Assistance Expenses	967,950			(19,935)			
100		907	International and Instructional Advertising Expenses	121,526			(682)			
101		908	Miscellaneous Customer Service & Informational Expenses	14,638						
102		910	Total Customer Accounts Expense	19,452,377			(165,171)	(202,140)		
103			Administrative and General Expenses							
104		920	Administrative & General Salaries	24,869,030			(359,093)	(1,120,032)		
105		921	Office Supplies & Expenses	9,869,281						
106		922	Administrative Expenses Transferred - Credit	(10,853,685)						
107		923	Outside Services Employed	9,837,809						
108		924	Property Insurance	2,539,551						
109		925	Indemnities	2,995,079						
110		926	Employee Pension & Benefits	20,685,813			(9,924)			
111		928	Regulatory Commission Expenses	1,200,636			(31,542)			
112		929	Duplicate Charges - Credit	(301,307)						
113		930.1	General Advertising Expenses	530,861			(8,235)			
114		930.2	Miscellaneous General Expenses	4,118,952						
115		931	Rents	322,450						
116		935	Maintenance of General Plant	90,310						
117			Total Administrative and General Expense	65,884,560			(408,794)	(1,120,032)		
118			Total Operation and Maintenance Expense	\$ 674,132,597	\$	\$	(1,470,721)	(2,530,620)	\$	\$ (2,982,638)
119			Depreciation & Amortization - All							
120		403/004/005	Plantable Plant	\$ 9,331,228	\$	\$			\$	\$
121		403/004/006	Other Production Plant	52,018,787						
122		403/004/008	Transmission Plant			(26,365,701)				
123		403/004/006	Distribution Plant	25,609,770						
124		403/004/006	General Plant	10,350,629						
125			Total Depreciation & Amortization - All	\$ 97,310,414	\$	\$ (26,365,701)			\$	\$
126			Taxes Other Than Income Taxes							
127		408	Property Tax - Production	\$ 15,733,923	\$	\$			\$	\$
128		408	Property Tax - Other Production							
129		408	Property Tax - Transmission (EHV & Non-EHV)							
130		408	Property Tax - Distribution	13,059,052						
131		408	Property Tax - General	1,719,601						
132		408	Business Activity Tax - Generation	4,272						
133		408	Business Activity Tax - Transmission							
134		408	Other (Including Payroll Taxes)	4,624,641					(272,631)	
135			Total Taxes Other Than Income Taxes	\$ 35,147,489	\$	\$			(272,631)	\$
136			Customer Deposit Interest Expense							
137		431	Customer Deposit Interest Expense	\$ 45,852						
138			Current Income Tax - State & Federal							
139		409	Deferred IT - Federal & State (debits)	\$ 7,016,368						
140		410	Deferred IT - Federal & State (credits)							
141		411	Deferred IT - Federal & State (credits)							
142			Total Income Taxes	\$ 7,016,368	\$	\$ (26,365,701)	(1,470,721)	(2,530,620)	(272,631)	\$ (2,982,638)
143			Total Operating Expense	\$ 813,648,720	\$	\$	1,470,721	2,530,620	272,631	2,982,638
144			OPERATING INCOME (Test Year Adjusted)	\$ 52,471,135	\$ 6,961,004	\$ 26,365,701	\$ 1,470,721	\$ 2,530,620	\$ 272,631	\$ 2,982,638

OPERATING INCOME → RUCO ADJUSTMENTS

LINE NO.	FERC ACCT	DESCRIPTION	(H) Adjustment 7 Overhaul and Outage	(I) Adjustment 8 Injuries and Damages	(J) Adjustment 9 Officers and Director's Ins.	(K) Adjustment 10 Line Expense	(L) Adjustment 11 Rate Case Expense	(M) Adjustment 13 Property Tax Expense	(N) Adjustment 12 Miscellaneous and General	(O) Adjustment 14 Income Tax Expense	(P) AS ADJUSTED RUCO
1	440, 442, 444, 445	Electric Retail Revenue	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ 836,937,887
2	446	Sales for Resale	-	-	-	-	-	-	-	-	-
3	447	Total Electric Retail Revenue	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ 836,937,887
4		Other Operating Revenue	-	-	-	-	-	-	-	-	-
5	451	Miscellaneous Service Revenues	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ 5,806,04
6	454	Rent from Electric Property	-	-	-	-	-	-	-	-	\$ 30,220,553
7	456	Other Electric Revenues	-	-	-	-	-	-	-	-	116,375
8		Total Other Operating Revenue	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ 36,142,972
9		Total Operating Revenue	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ 873,080,859
10		Steam Power Generation Expense	-	-	-	-	-	-	-	-	-
11	500	Operation Supervision & Engineering	-	-	-	-	-	-	-	-	\$ 9,806,851
12	501	Fuel - PP&AC Eligible	-	-	-	-	-	-	-	-	292,173,716
13	502	Steam Expenses	-	-	-	(149,998)	-	-	-	-	17,468,845
14	505	Electric Expenses	-	-	-	-	-	-	-	-	2,801,584
15	506	Miscellaneous Steam Power Expenses	-	-	-	-	-	-	-	-	6,434,127
16	507	Rents	-	-	-	-	-	-	-	-	85,647,219
17	510	Maintenance Supervision & Engineering	-	-	-	-	-	-	-	-	4,109,696
18	511	Maintenance of Structures	-	-	-	-	-	-	-	-	4,068,745
19	512	Maintenance of Boiler Plant	-	-	-	-	-	-	-	-	25,678,013
20	513	Maintenance of Electric Plant	(4,883,016)	-	-	-	-	-	-	-	7,875,620
21	514	Maintenance Miscellaneous Steam Plant	-	-	-	-	-	-	-	-	7,455,298
22	514	PAS 143 Accretion Expense	-	-	-	-	-	-	-	-	-
23	411	Gain on Sales of Emission Allowances	-	-	-	-	-	-	-	-	-
24		Total Steam Power Generation Expenses	(4,883,016)	-	-	(149,998)	-	-	-	-	463,519,715
25		Other Power Generation Expenses	-	-	-	-	-	-	-	-	-
26	546	Operation Supervision & Engineering	-	-	-	-	-	-	-	-	\$ 3,764,743
27	547	Fuel - PP&AC Eligible	\$ -	-	\$ -	-	\$ -	-	\$ -	-	-
28	548 & 549	Misc. Other Power Generation	-	-	-	-	-	-	-	-	-
29	550	Rents	-	-	-	-	-	-	-	-	-
30	551	Maintenance Supervision & Engineering	-	-	-	-	-	-	-	-	-
31	551	Maintenance Plant	-	-	-	-	-	-	-	-	-
32	552 - 554	Other Expenses	-	-	-	-	-	-	-	-	-
33	557	Total Power Generation Expense	-	-	-	-	-	-	-	-	-
34		Other Power Supply Expense	-	-	-	-	-	-	-	-	-
35	555	Purchased Power - Demand - PP&AC Eligible	\$ -	-	\$ -	-	\$ -	-	\$ -	-	124,929
36	555	Purchased Power - Demand - PP&AC Eligible	-	-	-	-	-	-	-	-	1,077,914
37	555	Purchased Power - Demand - PP&AC Eligible	-	-	-	-	-	-	-	-	523,343
38	556	System Control and Load Dispatching	-	-	-	-	-	-	-	-	5,590,930
39		Total Other Power Supply Expense	-	-	-	-	-	-	-	-	-
40		TOTAL PRODUCTION EXPENSE	(4,883,016)	-	-	(149,998)	-	-	-	-	469,110,845

Test Year Ended December 31, 2011

[illegible]

OPERATING INCOME - RUCO ADJUSTMENTS

LINE NO.	FERC ACCT	DESCRIPTION	(H) Adjustment 7 Overhaul and Outage	(I) Adjustment 8 Injuries and Damages	(J) Adjustment 9 Officers and Directors Ins.	(K) Adjustment 10 Line Expense	(L) Adjustment 11 Rate Case Expense	(M) Adjustment 13 Property Tax Expense	(N) Adjustment 12 Miscellaneous and General	(O) Adjustment 14 Income Tax Expense	(P) RUCO AS ADJUSTED
93		Customer Account Expense									
94	901	Supervision	\$	\$							
95	902	Meter Reading Expenses									
96	903	Customer Records & Collection Expenses									3,037,059
97	904	Uncollectible Accounts									12,884,197
98	905	Miscellaneous Customer Accounts Expenses									2,060,293
99	908	Customer Assistance Expenses									948,015
100	909	Informational and Instructional Advertising Expenses									120,864
101	910	Miscellaneous Customer Service & Informational Expenses									14,638
102		Total Customer Accounts Expense									19,095,065
103		Administrative and General Expense									
104	920	Office Supplies & General Salaries	\$	\$							
105	921	Office Supplies & Expenses									23,389,905
106	922	Administrative Expenses Transferred - Credit									9,869,281
107	923	Outside Services Employed									(10,853,685)
108	924	Property Insurance									9,837,609
109	925	Injuries and Damages			(289,320)						2,539,551
110	928	Employee Pension & Benefits									2,695,835
111	928	Regulatory Commission Expenses									20,664,271
112	929	Duplicate Charges - Credit					(346,667)				853,869
113	930.1	General Advertising Expenses									(301,307)
114	930.2	Miscellaneous General Expenses							(2,139,016)		522,626
115	931	Rents									1,979,936
116	932	Repairs									332,450
117	935	Maintenance of General Plant									50,310
118		Total Administrative and General Expense			(289,320)		(346,667)		(2,139,016)		61,550,751
119		Total Operation and Maintenance Expense	\$ (4,883,016)	\$	\$ (289,320)	\$ (149,998)	\$ (346,667)	\$	\$ (2,139,016)	\$	\$ 659,334,523
120		Depreciation & Amortization - All									
121	403/404/406	Intangible Plant	\$	\$							9,331,228
122	403/404/406	Other Production Plant									52,018,767
123	403/404/406	Transmission Plant									(26,385,701)
124	403/404/406	Distribution Plant									25,608,770
125	403/404/406	General Plant									10,350,629
126		Total Depreciation & Amortization - All	\$	\$							70,944,713
127		Taxes Other Than Income Taxes									
128	408	Property Tax - Production	\$	\$				\$ (1,418,488)			14,315,435
129	408	Property Tax - Other Production									
130	408	Property Tax - Transmission (EHV & Non-EHV)									
131	408	Property Tax - Distribution						\$ (1,711,840)			11,347,212
132	408	Property Tax - General						\$ 19,780			1,739,381
133	408	Business Activity Tax - Generation									4,272
134	408	Business Activity Tax - Transmission									
135	408	Other (Including Payroll Taxes)									4,352,010
136		Total Taxes Other Than Income Taxes	\$	\$				\$ (3,110,547)			31,758,310
137	431	Customer Deposit Interest Expense									45,852
138		Current Income Tax - State & Federal								\$ 22,525,476	
139	409	Deferred IT - Federal & State (debit)									29,543,844
140	410	Deferred IT - Federal & State (debit)									
141	411	Deferred IT - Federal & State (credits)									
142		Total Income Taxes	\$ (4,883,016)	\$	\$ (289,320)	\$ (149,998)	\$ (346,667)	\$ (3,110,547)	\$ (2,139,016)	\$ 22,525,476	\$ 29,543,844
143		Total Operating Expense	\$	\$	\$	\$	\$	\$	\$	\$	\$ 791,627,242
143		OPERATING INCOME [Test Year Adjusted]	\$ 4,883,016	\$	\$ 289,320	\$ 149,998	\$ 346,667	\$ 3,110,547	\$ 2,139,016	\$ (22,525,476)	\$ 81,453,617

**OPERATING EXPENSE ADJUSTMENT NO. 1
OTHER OPERATING INCOME**

Line No.	Acct	DESCRIPTION	(A) COMPANY PROPOSED	(B) RUCO ADJUSTMENT	(C) RUCO AS ADJUSTED
1	451	Miscellaneous Service Income	\$ 5,806,044	\$ -	\$ 5,806,044
2	454	Rent from Electric Property	23,259,549	6,961,004	30,220,553
3	456	Other Electric Revenues	116,375	-	116,375
4					
5		Total Other Operating Income	<u>\$ 29,181,968</u>	<u>\$ 6,961,004</u>	<u>\$ 36,142,972</u>
6					
7					
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References:

Column (A) Company Schedules
Column (B) Company Response to RUCO Data Request 8.04
Mr. DeConcici's Testimony Page 37 Lns 4 through 7

OPERATING EXPENSE ADJUSTMENT NO. 2
DEPRECIATION / AMORTIZATION

Line No.	Acct	DESCRIPTION	(A) COMPANY PROPOSED	(B) RUCO ADJUSTMENT	(C) RUCO AS ADJUSTED
1	Various	Total Depreciation Expense	\$ 97,310,414	\$ (26,365,701)	\$ 70,944,713
2	407.3	Regulatory Asset Amortization	2,982,638	(2,982,638)	\$ -
3					
4					
5		Total Other Operating Income	<u>\$ 100,293,052</u>	<u>\$ (29,348,339)</u>	<u>\$ 70,944,713</u>
6					
7					
8					
9		Total Plant Depreciation Adjustments			
10		Depreciation adjustment due reduction in Gross Plant		\$ 3,922,727	See RBM Sch 5-1
11		Depreciation adjustment related to removing office bldg.		1,885,760	See RBM Sch 5-2
12		Depreciation reduction due to return to ratepayers			
13		of excess depreciation reserve		20,557,214	FWR Testimony
14		Total Depreciation reduction		<u>\$ 26,365,701</u>	
15					
16					
17					
18					
19					
20					
21					
22					

References:

Column (A) Company Schedules
Column (B) RUCO Adjustments Total Depreciation Expense See Lns 10, 11, and 12
Column (B) RBM-5
Column (B) Company Schedules

OPERATING EXPENSE ADJUSTMENT NO. 3
PAYROLL EXPENSE ADJUSTMENT

			(A)	(B)	(C)	(D)	(E)
	FERC			ACC	Percentage	RUCO	RUCO
	ACCT	ACCOUNT DESCRIPTION	Total Co	Jurisdictional	of Total	O&M Adj	O&M Final
4	0500	Steam Prod Oper-Supervision	\$ 321,629	\$ 286,466	9.88%	\$ 141,116	(145,350)
5	0501	Fuel - Steam	31,498	31,498	1.09%	15,516	(15,982)
6	0502	Steam Expenses	344,202	306,571	10.58%	151,020	(155,551)
7	0505	Electric Expenses	106,130	94,527	3.26%	46,565	(47,962)
8	0506	Steam Prod-Misc Expense	102,894	91,645	3.16%	45,145	(46,500)
9	0510	Maint-Supervision & Engr	126,723	112,868	3.89%	55,600	(57,268)
10	0511	Maint of Structures	29,484	26,261	0.91%	12,936	(13,325)
11	0512	Maint of Boiler Plant	283,575	266,129	9.18%	131,098	(135,031)
12	0513	Steam Prod-Mnt Elec Plnt	82,357	73,353	2.53%	36,134	(37,219)
13	0514	Steam Prod-Mnt Misc Plnt	107,457	95,709	3.30%	47,147	(48,562)
14	0546	Other Prod Oper-Supervision	1,603	1,428	0.05%	703	(725)
15	0549	Misc Other Pw Gen Exp	228	203	0.01%	100	(103)
16	0552	Maint of Structures	1,166	1,039	0.04%	512	(527)
17	0553	Maint Gen & Elec Plant	4,237	3,774	0.13%	1,859	(1,915)
18	0554	Maint of Misc Oth Pwr Gen Plant	1,019	908	0.03%	447	(461)
19	0556	Sys Cntrl/Load Dispatch	50,832	-	0.00%	-	-
20	0557	Prod Expense-Other	16,552	14,742	0.51%	7,262	(7,480)
21	0560	Trans-Oper Supv & Engr	36,366	-	0.00%	-	-
22	0561	Trans-Load Dispatch	51	-	0.00%	-	-
23	0566	Trans-Misc Oper Expense	2,695	-	0.00%	-	-
24	0568	Trans-Maint Supv & Engr	8,654	-	0.00%	-	-
25	0569	Trans-Maint of Structures	7	-	0.00%	-	-
26	0570	Trans-Maint Stn Equip	91,651	-	0.00%	-	-
27	0571	Trans-Maint of OH Lines	17,703	-	0.00%	-	-
28	0573	Trans-Maint Misc Trans Plnt	6	-	0.00%	-	-
29	0580	Dist-Oper Supv & Engr	35,603	35,603	1.23%	17,538	(18,065)
30	0581	Dist-Load Dispatching	18,929	18,929	0.65%	9,325	(9,604)
31	0582	Dist-Station Expenses	2,677	2,677	0.09%	1,319	(1,358)
32	0583	Dist-Overhead Line Exp	15,472	15,472	0.53%	7,622	(7,850)
33	0584	Dist-Underground Line Exp	5,450	5,450	0.19%	2,685	(2,765)
34	0585	Dist-Light/Signal Exp	198	198	0.01%	98	(100)
35	0586	Dist-Meter Expenses	44,665	44,665	1.54%	22,002	(22,663)
36	0587	Dist-Customer Install Exp	5,085	5,085	0.18%	2,505	(2,580)
37	0588	Dist-Misc Expense	139,011	139,011	4.80%	68,478	(70,533)
38	0590	Dist-Maint Supv & Engr	24,258	24,258	0.84%	11,950	(12,308)
39	0592	Dist-Maint Stn Equip	21,327	21,327	0.74%	10,506	(10,821)
40	0593	Dist-Maint of OH Lines	26,614	26,614	0.92%	13,110	(13,504)
41	0594	Dist-Maint of UG Lines	2,951	2,951	0.10%	1,454	(1,497)
42	0595	Dist-Mnt Line Transformers	11,513	11,513	0.40%	5,671	(5,842)
43	0597	Dist-Maint of Meters	4,433	4,433	0.15%	2,184	(2,249)
44	0598	Dist-Maint Misc Plant	2,084	2,084	0.07%	1,027	(1,057)
45	0903	Cust Rec/Collection Exp	284,937	284,937	9.83%	140,363	(144,574)
46	0908	Customer Assistance Exp	39,290	39,290	1.36%	19,355	(19,935)
47	0909	Informational/Instrct Adv Exp	1,305	1,305	0.05%	643	(662)
48	0920	A&G Salaries	800,149	707,727	24.42%	348,634	(359,093)
49	0925	Injuries & Damages	22,113	19,559	0.67%	9,635	(9,924)
50	0926	Pensions & Benefits	70,284	62,166	2.14%	30,624	(31,542)
51	0930	General Advertising Exp	18,350	16,230	0.56%	7,995	(8,235)
52	5611	Load Dispatch-Reliability	40,742	-	0.00%	-	-
53	5612	Load Dispatch-Monitor and Operation Tran	41,400	-	0.00%	-	-
54	5613	Load Dispatch-Transmission Service and S	23,550	-	0.00%	-	-
55							
56		TOTALS	\$ 3,471,110	\$ 2,898,605	100%	\$ 1,427,884	(1,470,721)

References

Column (A) per Company calculated based on two years projected increases. See RBM-11 Page 2 of 2
Column (B) per Company calculation of ACC Jurisdictional
Column (C) Individual Account Compared to Total
Column (D) See RBM-11 Page 2 of 2

OPERATING INCOME ADJUSTMENT NO. 3
PAYROLL EXPENSE ADJUSTMENT - CALCULATIONS

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
	<u>Total</u>	<u>Clearing Acct</u>	<u>UNS Chargebacks</u>	<u>Deduct</u>	<u>Exclude A&G</u>	<u>Deduct</u>	<u>Deduct</u>	<u>TOTAL</u>
	<u>Payroll</u>	<u>Allo. to O&M</u>	<u>to TEP O&M</u>	<u>SGS Unit 1</u>	<u>Payroll Capitalized</u>	<u>SGS Unit 3</u>	<u>SGS Unit 4</u>	<u>O&M Wages</u>
				<u>Disallowance</u>	<u>Through A&G</u>	<u>Wages</u>	<u>Wages</u>	
1								
2								
3								
4								
5	2010	\$ 66,184,613	\$ 10,580,705	\$ 3,274,638	\$ (5,447,068)	\$ (6,022,809)	\$ (6,381,524)	\$ (6,780,351) \$ 55,408,205
6	2011	<u>68,355,320</u>	<u>10,919,911</u>	<u>3,654,525</u>	<u>(6,013,389)</u>	<u>(4,911,883)</u>	<u>(6,286,501)</u>	<u>(7,132,454)</u> <u>58,585,529</u>
7		134,539,934	21,500,616	6,929,163	(11,460,457)	(10,934,692)	(12,668,026)	(13,912,805) 113,993,733
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Total Payroll Adjustment - Per Company \$ 3,471,110

Total Company Payroll Adjustment \$ 3,471,110 Ln 21

Total TEP Payroll Adjustment
ACC Jurisdiction 2,898,605 Per Company Schedule C-2

Percentage Allocated to TEP 83.51%

Average Wage Increase per Company for 2012 1,709,906 Ln 13

Wage Increase for 2012 Related to TEP per RUCO \$ 1,427,884 Ln 32 * Ln 30

Adjustment Required Per RUCO \$ (1,470,721) Ln 34 - Ln 28

References:

Columns (A) through (H) Lns 1 through 21 Provided by Company

OPERATING INCOME ADJUSTMENT NO. 4
INCENTIVE COMPENSATION

LINE NO.	ACCT NO.	DESCRIPTION	(A) COMPANY DISTRIBUTION OF INC COMP ADJ'MENT	(B) ALLOCATION FACTOR	(C) RUCO DISTRIBUTION OF INC COMP ADJ'MENT	(D) JURISDICTIONAL ALLOCATION	(E) RUCO ACC JURISDICTIONAL
1	500	Operation Supervision & Engineering - Gen.	\$ 55,519	2.22%	\$ (74,915)	89.07%	\$ (66,725)
2	506	Miscellaneous Steam Power Expenses	520,332	20.82%	(702,116)	89.07%	(625,354)
3	566	Miscellaneous Transmission Expenses	388,687	15.55%	(524,479)	0.00%	-
4	588	Miscellaneous Distribution Expenses	142,306	5.69%	(192,022)	100.00%	(192,022)
5	903	Customer Records & Collection Expenses	149,804	5.99%	(202,140)	100.00%	(202,140)
6	920	Administrative & General Salaries	938,441	37.55%	(1,266,295)	88.45%	(1,120,032)
7	514	Maintenance Miscellaneous Steam Plant	205,015	8.20%	(276,639)	89.07%	(246,394)
8	570	Maintenance of Station Equipment	41,033	1.64%	(55,368)	0.00%	-
9	598	Maintenance of Miscellaneous Distribution Plant	22,502	0.90%	(30,363)	100.00%	(30,364)
10	580	Operation Supervision & Engineering - Dist.	35,269	1.41%	(47,591)	100.00%	(47,590)
11							
12		SUB-TOTALS	\$ 2,498,908	100.00%	\$ (3,371,928)		\$ (2,530,620)
13							
14	408	FICA Taxes			\$ (215,697)		\$ (189,797)
15							
16					<u>\$ (3,587,625)</u>		<u>\$ (2,720,417)</u>
17							

NOTE:

RUCO Determination Of The Test-Year Incentive Compensation Payroll And FICA Taxes Expense Level:

STEP ONE: Restate Expense From 4-Year Average To Test Year Actual Level

	REFERENCE	PAYROLL	FICA TAXES
23	Adj. TY Level Of Payroll And FICA Taxes (3-Yr Average)	Company Workpapers \$ 6,247,890	\$ 468,592
24	Actual Test-Year Level Of Payroll And FICA Taxes	Company Workpapers \$ 5,751,924	\$ 431,394
25	RUCO Adjustment To Adhere To Historical TY Principle	Ln 23 - Ln 24 \$ (495,966)	

STEP TWO: Split Expense On A 50/50 Basis

28	Company Test-Year Level Of Payroll And FICA Taxes	Company Workpapers \$ 5,751,924	\$ 431,394
29	RUCO Adjustment To Split Expense On A 50/50 Basis	50% Of Line 28 \$ (2,875,962)	\$ (215,697)

31	RUCO Adjusted Expense (See Col. (C), Lines 25 & 29)	Sum Lines 25 & 29 \$ (3,371,928)	\$ (215,697)
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33	RUCO Adjustment - Total Company	Sum Line 18, Col.'s (B) & (C)	<u>\$ (3,587,625)</u>
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35	RUCO Adjustment - ACC Jurisdictional		<u>\$ (2,720,417)</u>
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References:

- Column (A): Company Workpapers
- Column (B): Individual Account Allocation Based On Percentage Of Each FERC Account To Total
- Column (C): RUCO Adjustment To Incentive Compensation Allocated By Computed Factors In Column (B)

OPERATING EXPENSE ADJUSTMENT NO. 5
PAYROLL TAX EXPENSE

	(A)	(B)	(C)
1 <u>TEP Employer Tax - 2011</u>			
2 Social Security	\$ 7,311,295	per Form 941	
3 Medicare	1,963,775	per Form 941	
4 FUTA/SUTA	<u>206,758</u>	per FUTA and SUTA returns	
5	9,481,829		
6			
	Wages, tips and other compensation from Form		
7	941		
8 1Q 2011	35,453,451		
9 2Q 2011	27,489,066		
10 3Q 2011	31,254,470		
11 4Q 2011	<u>31,940,018</u>		
12	<u>126,137,006</u>	0.075 Ln 5 / Ln 12	
13			
14 Payroll Adjustment Per RUCO - RBM-12 Page 1		1,470,721	
15			
16 Employer Payroll Tax Adjustment per RUCO		\$ 110,555	Ln 14 x Ln 12
17			
18 Employer Payroll Tax Adjustment per TEP		<u>193,390</u>	Company Schedule C-2
19			
20 Adjustment to Payroll Tax for Payroll Adjustments per RUCO		<u>\$ (82,835)</u>	Ln 16 - Ln 18
21			
22			
23			
24 Payroll Tax Expense Adjustment - Payroll Adjustments		\$ (82,835)	Per Above
25 Payroll Tax Expense Adjustment - Incentive Adjustment		<u>\$ (189,797)</u>	See RBM-12 Ln E-14
26			
27 Total Payroll Tax Expense Adjustment		<u>\$ (272,631)</u>	RUCO Adjustment
28			
29			
30 References:			
31 Columns (A through C) Lns 1 through 12 Company Workpapers			
32			

OPERATING INCOME ADJUSTMENT NO. 7
OVERHAUL AND OUTAGE

LINE NO.	Acct No.	DESCRIPTION	(A) TEP AS FILED	(B) RUCO RECOMMENDED	(B) ALLOCATION FACTOR	(C) RUCO AS ADJUSTED
1						
2		Expenditures by Plant Location				
3		Four Corners				
4		Estimated recurring expense	\$ 1,108,013	413,000		
5		Actual test year expenditures	1,012,000	1,012,000		
6		Adjustment	96,013	(599,000)	93.85%	\$ (562,162)
7						
8		Navajo				
9		Estimated recurring expense	2,133,721	1,244,000		
10		Actual test year expenditures	3,210,000	3,210,000		
11		Adjustment	(1,076,279)	(1,966,000)	93.85%	\$ (1,845,091)
12						
13		San Juan				
14		Estimated recurring expense	5,784,261	7,142,000		
15		Actual test year expenditures	6,667,000	6,667,000		
16		Adjustment	(882,739)	475,000	93.85%	\$ 445,788
17						
18		Luna				
19		Estimated recurring expense	591,308	1,026,000		
20		Actual test year expenditures	869,000	869,000		
21		Adjustment	(277,692)	157,000	93.85%	\$ 147,345
22						
23		Springerville Excluding #1				
24		Estimated recurring expense	2,779,583	-		
25		Actual test year expenditures	-	-		
26		Adjustment	2,779,583	-	93.85%	\$ -
27						
28		Sundt / Irvington				
29		Estimated recurring expense	2,631,115	-		
30		Actual test year expenditures	2,000,000	2,000,000		
31		Adjustment	631,115	(2,000,000)	93.85%	\$ (1,877,000)
32						
33		Net Estimated Recurring Expenses	15,028,001	9,825,000		
34		Net Test Year Expenditures	13,758,000	13,758,000		
35						
36		COMPANY ADJUSTMENT	\$ 1,270,001	\$ (3,933,000)		(1,191,896)
37						
38		RUCO ADJUSTMENT				
39						
40		RUCO ADJUSTMENT - ACC JURISDICTIONAL				\$ (4,883,016)

The Company calculated their estimated recurring expense utilizing seven years going forward average. Years included in their calculations were years 2012 thru 2018

RUCO included only the projected expenses for only year 2012. RUCO believes that this is the only known and measurable adjustment that should be made to the account.

References:

Column (A) Included in Company Workpapers
Column (B) Estimated recurring expense - See Data Response

OPERATING EXPENSE ADJUSTMENT NO. 8
INTENTIONALLY LEFT BLANK

Line No.	DESCRIPTION	(A) COMPANY PROPOSED	(B) RUCO ADJUSTMENT	(C) RUCO AS ADJUSTED
1				
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OPERATING EXPENSE ADJUSTMENT NO. 9
OFFICERS AND DIRECTORS INSURANCE

Line No.	DESCRIPTION	(A) COMPANY PROPOSED	(B) RUCO ADJUSTMENT	(C) RUCO AS ADJUSTED
1 925	Officers and Directors Liability Insurance	\$ 654,200	\$ 327,100	\$ 327,100
2				
3	TEP Allocation Percentage			88.45%
4				
5	Total RUCO Adjustment to ACC Jurisdictional	\$ 654,200	\$ 327,100	\$ 289,320
6				
7				
8				
9	Company Proposed	\$ 654,200		
10	Split between Ratepayers			
11	and Shareholders			
12	50 / 50	\$ 327,100		
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23	References:			
24	Column (A) See TEP Data Response 1.60 Insurance Expense			

OPERATING INCOME ADJUSTMENT NO. 10

LIME EXPENSE														
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Company	RUCO
	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	TOTALS	Recalculations
1 Actual data 2011														
Lime Cost (product, freight, fuel surcharge, tax LESS add'l lime reimbursed to U12 from U34)	1,309,533	730,258	1,367,613	845,973	1,113,841	974,987	1,008,956	1,232,465	989,364	713,135	807,962	1,056,414	12,150,501	
2														
3 Monthly lime cost per ton	128.59	129.29	129.38	129.38	129.38	129.38	130.10	133.84	134.16	134.16	134.16	134.16	131.33	
4 Sulfur Credit	-	(587,008)	(603,416)	(673,544)	(237,807)	(711,411)	(394,186)	(420,171)	(380,972)	(80,432)	(279,245)	(420,846)	(4,789,038)	
5														
Gross Generation	550,674	524,974	495,553	539,275	574,309	466,649	586,914	557,653	531,105	301,505	413,735	559,704	6,102,050	
6 Net Lime (Lime cost less lime credit less add'l lime reimbursed from U3&4)	1,309,533	143,250	764,197	172,429	876,034	263,576	614,770	812,294	608,392	632,703	528,717	635,568	7,361,463	
7 Cost per MWh	2.38	0.27	1.54	0.32	1.53	0.56	1.05	1.46	1.15	2.10	1.28	1.14	1.21	
8														
9														
10														
11														
12														
13 Actual data 2012														
Lime Cost (product, freight, fuel surcharge, tax LESS add'l lime reimbursed to U12 from U34)	634,048	1,935,884	1,374,806	1,233,063	1,193,982	1,413,620	1,016,163	1,270,043	1,016,552	713,135	807,962	1,056,414	11,088,160	13,665,671
14 Monthly lime cost per ton	136.13	140.83	140.58	140.58	140.58	141.42	141.42	143.90	143.74				141.02	141.02
15 Sulfur Credit	(453,821)	(317,250)	(337,746)	(477,949)	(329,199)	(285,429)	(355,276)	(2,925)	(449,880)	(80,432)	(279,245)	(420,846)	(3,009,275)	(3,789,798)
16 Gross Generation	564,728	554,055	558,005	520,258	573,361	508,455	569,382	598,828	498,909	301,505	413,735	559,704	4,945,981	6,220,925
17 Net Lime (Lime cost less lime sulfur credit)	180,227	1,618,634	1,037,060	755,114	864,783	1,128,191	660,887	1,267,118	566,872	632,703	528,717	635,568	8,078,885	9,875,873
18 Cost per MWh	0.32	2.92	1.86	1.45	1.51	2.22	1.16	2.12	1.14	-	-	-	1.63	1.59
19														
20														
21														
22														
23														
24 Unit 1 Gross Production 2011														31.6%
25 Unit 2 Gross Production 2011														35.4%
26														
												</		

References:

Original Worksheet provided in Company Workpapers and updated per RUCO Date Response through September 2012
October through December of 2012 estimates based on actual October through December 2011
RUCO Adjustments primarily due to Company's original estimate did not include sufficient Sulfur Credits

RUCO ADJUSTMENT TO LIME EXPENSE - Ln M25 - N25

\$ 149,998

**OPERATING INCOME ADJUSTMENT NO. 11
RATE CASE EXPENSE**

Line No.	DESCRIPTION	(A) COMPANY PROPOSED	(B) RUCO ADJUSTMENT	(C) RUCO AS ADJUSTED
1	Rate Case Expense	\$ 1,415,000	\$ 915,000	\$ 500,000
2				
3				
4				
5	RUCO's Proposed Rate Case Expense:		\$ 500,000	
6				
7				
8				
9	RUCO's recommendation is based on two factors: (1) What has been approved in			
10	prior rate cases by the Commission; (2) What is fair and reasonable to the rate payer.			
11				
12				
13	RUCO Recommended Annual Amortization (4 years)			4
14				
15	RUCO Recommended Annual Amortization (Ln 1 / Ln 13)			\$ 125,000
16				
17	TEP Rate Case Expense as Filed (Amortization Period 3 years)			\$ 471,667
18				
19	RUCO Pro Forma Rate Case Expense (Ln 15 - Ln 17)			<u>\$ (346,667)</u>

<u>TEP Estimated Expenses</u>	
Outside Counsel	\$620,000
Depreciation Study	\$365,000
Rate Design Study	\$175,000
Tax Adjustment Study	\$140,000
Cost of Equity Study	\$115,000
Total Estimated Expense	<u>\$1,415,000</u>

**OPERATING INCOME ADJUSTMENT NO. 12
MISCELLANEOUS GENERAL EXPENSES**

Line No.	CONTRIBUTIONS	(A) RUCO ADJUSTMENTS
1	Operating Expense of Corporate Building	\$ 2,100,000
2	Charitable Contributions	39,016
3		
4		<u>\$ 2,139,016</u>
5		
6		
7		
8	Charitable Contributions	\$ 1,250
9	United Way of Northern Arizona	6,714
10	United Way of Tuscon and Southern Arizona	14,232
11	Boys and Girls Club of Tuscon	950
12	Charitable Contributions	3,060
13	Charitable Contributions	1,000
14	Society for Human Reso	165
15	Charitable Contributions	240
16	Charitable Contributions	1,500
17	Thomas Alva Edison Foundation	<u>15,000</u>
18		
19	TOTAL CONTRIBUTIONS IDENTIFIED	\$ 44,111
20		
21	ACC JURISDICTIONAL	<u>88.45%</u>
22		
23	TOTAL RUCO ADJUSTMENT FOR CONTRIBUTIONS	<u>\$ 39,016</u>
24		
25		
26		
27		
28	Reference:	
29	Column (A) Ln 1 Sch RBM-5 page 2 Ln 1	
30	Ln 8 through Ln 17 - See response to RUCO Data Request 8.09	
31		
32		
33		
34		
35		
36		
37		

OPERATING INCOME ADJUSTMENT NO. 13
PROPERTY TAX EXPENSE

Line No.	DESCRIPTION	(A) COMPANY PROPOSED	(B) RUCO ADJUSTMENT	(C) RUCO AS ADJUSTED
1	Property Tax Expense - Steam Production	\$ 15,733,923	\$ (1,418,488)	\$ 14,315,435
2	Property Tax Expense - Distribution	13,054,052	\$ (1,711,840)	11,342,212
3	Property Tax Expense - General	1,719,601	\$ 19,780	1,739,381
4				
5	Total Property Tax Expense	<u>\$ 30,507,576</u>	<u>\$ (3,110,547)</u>	<u>\$ 27,397,029</u>
6				
7				
8				
9				
10	<u>ADJUSTMENT TO EXPENSE</u>	<u>Steam</u>	<u>Distribution</u>	<u>General</u>
11				
12	Reduction in Plant in Service	\$ 74,015,980	\$ 88,165,340	\$ -
13	Less: Accumulated Depreciation	(2,302,125)	(1,620,602)	(1,000,000)
14	Net Book Value	<u>71,713,855</u>	<u>86,544,738</u>	<u>(1,000,000)</u>
15				
16	Less: Assessment Ratio	<u>19.50%</u>	<u>19.50%</u>	<u>19.50%</u>
17				
18	Taxable Value	\$ 13,984,202	\$ 16,876,224	\$ (195,000)
19				
20	Average Tax Rate	<u>10.1435%</u>	<u>10.1435%</u>	<u>10.1435%</u>
21				
22	Property Tax Reduction	<u>\$ 1,418,488</u>	<u>\$ 1,711,840</u>	<u>\$ (19,780)</u>

References:

Column (A) Provided in Company Workpapers
Column (C) Ln 13 - RUCO's reduction in property tax related to new office building
Provided by Company. See Schedule RBM-5 Page 1
Column (A) and (B) Lns 12 and 13 See Schedule RBM-5

OPERATING INCOME ADJUSTMENT NO. 14
INCOME TAX EXPENSE

(Thousands of Dollars)

LINE NO.	DESCRIPTION	(A) REFERENCE	(B) AMOUNT
1	FEDERAL INCOME TAXES:		
2			
3	Operating Income Before Taxes	Schedule RBM-7, Column (C), Line 17 + Line 13	\$ 110,998
4	LESS:		
5	Arizona State Tax	Line 21	(5,208)
6	Interest Expense	Line 46	(36,257)
7	Federal Taxable Income	Sum Of Lines 1, 2 & 3	\$ 69,533
8			
9	Federal Tax Rate	Schedule RBM-1, Page 2, Column (A), Line 12	35.00%
10	Federal Income Tax Expense	Line 4 X line 5	\$ 24,337
11			
12	STATE INCOME TAXES:		
13			
14	Operating Income Before Taxes	Line 3	\$ 110,998
15	LESS:		
16	Interest Expense	Line 21	(36,257)
17	State Taxable Income		\$ 74,741
18			
19	State Tax Rate	Tax Rate	6.97%
20			
21	State Income Tax Expense	Line 17 X Line 19	\$ 5,208
22			
23	TOTAL INCOME TAX EXPENSE:		
24			
25	Federal Income Tax Expense	Line 10	\$ 24,337
26	State Income Tax Expense	Line 21	5,208
27	Total Income Tax Expense Per RUCO	Sum Of Lines 12 & 13	\$ 29,544
28	Total Income Tax Expense Per Company Filing (Schedule C-1)		7,019
29			
30	Difference	Line 27 - Line 28	\$ 22,525
31			
32	RUCO ADJUSTMENT TO INCOME TAX EXPENSE (See RBM 7, Column (C), Line 13)	Line 30	\$ 22,525
33			
34			
35			
36			
37			
38			
39			
40			
41			
42	NOTE (A):		
43	Interest Synchronization:		
44	Adjusted ACC Jurisdiction Rate Base (Schedule RBM-3, Column (D), Line 14)	\$ 1,237,439	
45	Weighted Cost Of Debt (Schedule RBM-22, Column (F), Line 1 + Line 2)	2.93%	
46	Interest Expense (Line 18 X Line 19)	\$ 36,257	

COST OF CAPITAL - ORIGINAL COST RATE BASE

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) RUCO ADJUSTMENTS	(C) RUCO AS ADJUSTED	(D) PERCENT	(E) COST RATE	(F) WEIGHTED COST RATE
1	Short-term Debt	\$ 10,000	\$ -	\$ 10,000	0.53%	1.42%	0.01%
2							
3	Long-term Debt	1,061,389	-	1,061,389	55.97%	5.22%	2.92%
4							
5	Common Equity	824,983	-	824,983	43.50%	10.00%	4.35%
6							
7	TOTAL CAPITAL	<u>\$ 1,896,372</u>	<u>\$ -</u>	<u>\$ 1,896,372</u>	<u>100.00%</u>		
8							
9	WEIGHTED COST OF CAPITAL (Sum Lines 1 Thru 5)						<u>7.28%</u>

COST OF CAPITAL - FAIR VAUE RATE BASE

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) RUCO ADJUSTMENTS	(C) RUCO AS ADJUSTED	(D) PERCENT	(E) COST RATE	(F) WEIGHTED COST RATE
18	Short-term Debt	\$ 10,000	\$ -	\$ 10,000	0.53%	1.42%	0.01%
19							
20	Long-term Debt	1,061,389	-	1,061,389	55.97%	3.03%	1.70%
21							
22	Common Equity	824,983	-	824,983	43.50%	7.81%	3.40%
23							
24	TOTAL CAPITAL	<u>\$ 1,896,372</u>	<u>\$ -</u>	<u>\$ 1,896,372</u>	<u>100.00%</u>		
25							
26	WEIGHTED COST OF CAPITAL (Sum Lines 1 Thru 5)						<u>5.11%</u>
27							
28							
29							

References:

Column (A): Company Schedule D-1
Column (B): Testimony, WAR
Column (C): Column (A) + Column (B)
Column (D): Column (C), Line Item / Total Capital
Column (E): Testimony, WAR
Column (F): Column (D) X Column (E)

TUCSON ELECTRIC POWER COMPANY

DOCKET NO. E-01933A-12-0291

DIRECT TESTIMONY

OF

WILLIAM A. RIGSBY

ON BEHALF OF

THE

RESIDENTIAL UTILITY CONSUMER OFFICE

DECEMBER 21, 2012

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EXECUTIVE SUMMARY

Based on the Residential Utility Consumer Office's analysis of Tucson Electric Power Company's application for a permanent rate increase, filed with the Arizona Corporation Commission on July 2, 2012, RUCO recommends the following:

Cost of Equity – RUCO recommends that the Commission adopt a 10.00 percent cost of common equity. This 10.00 percent figure falls above the high side of the range of results obtained in RUCO's cost of equity analysis, and is 75 basis points lower than Tucson Electric Power Company's proposed 10.75 percent cost of common equity. The 10.00 percent figure takes into consideration the lower level of equity in RUCO's recommended capital structure as compared to RUCO's sample of electric companies that face similar risk.

Capital Structure – RUCO recommends that the Commission adopt Tucson Electric Power Company's actual end of test year capital structure comprised of 43.50 percent common equity, 55.97 percent long-term debt and 0.53 percent short-term debt.

Cost of Debt – RUCO recommends that the Commission adopt RUCO's recommended cost of long-term debt of 5.22 percent and cost of short-term debt of 1.42 percent which are Tucson Electric Power Company's actual end of test year costs of debt.

Original Cost Rate of Return – RUCO recommends that the Commission adopt a 7.28 percent weighted average cost of capital as the original cost rate of return for Tucson Electric Power Company. This 7.28 percent figure is the weighted cost of RUCO's recommended costs of common equity and debt, and is 46 basis points lower than the 7.74 percent weighted average cost of capital being proposed by Tucson Electric Power Company.

Fair Value Rate of Return – RUCO recommends that the Commission adopt a fair value rate of return of 5.11 percent for Tucson Electric Power Company which is RUCO's 7.28 percent original cost rate of return minus RUCO's recommended inflation adjustment of 2.17 percent. The method used by RUCO to arrive at this 7.28 percent figure is consistent with the methods adopted by the Arizona Corporation Commission in prior UNS Gas, Inc. and UNS Electric, Inc. rate case proceedings.

EXECUTIVE SUMMARY (Cont.)

RUCO disagrees with a number of inputs that Tucson Electric Power Company's cost of capital consultant used in both the discounted cash flow model and the capital asset pricing model which were used to develop Tucson Electric Power Company's proposed cost of common equity estimate of 10.75 percent. This includes forecasted yields on long-term U.S. Treasury instruments, and forecasted data on companies that make up the Standard & Poor's 500 stock index as opposed to the most recent actual yields and actual historic data.

INTRODUCTION

Q. Please state your name, occupation, and business address.

A. My Name is William A. Rigsby. I am the Chief of Accounting and Rates for the Residential Utility Consumer Office ("RUCO") located at 1110 W. Washington, Suite 220, Phoenix, Arizona 85007.

Q. Please describe your qualifications in the field of utilities regulation and your educational background.

A. I have been involved with utilities regulation in Arizona since 1994. During that period of time I have worked as a utilities rate analyst for both the Arizona Corporation Commission ("ACC" or "Commission") and for RUCO. I hold a Bachelor of Science degree in the field of finance from Arizona State University and a Master of Business Administration degree, with an emphasis in accounting, from the University of Phoenix. I have been awarded the professional designation, Certified Rate of Return Analyst ("CRRRA") by the Society of Utility and Regulatory Financial Analysts ("SURFA"). The CRRRA designation is awarded based upon experience and the successful completion of a written examination. Appendix I, which is attached to my direct testimony further describes my educational background and also includes a list of the rate cases and regulatory matters that I have been involved with.

1 **Q. What is the purpose of your testimony?**

2 A. The purpose of my testimony is to present recommendations based on my
3 analysis of Tucson Electric Power Company's ("TEP" or the "Company")
4 application for a permanent increase in rates ("Application").
5

6 **Q. Is this your first case involving TEP?**

7 A. No. I testified in TEP's prior rate case before the Commission.
8

9 **Q. Briefly describe TEP.**

10 A. TEP is based in Tucson, Arizona and is the second largest investor-owned
11 electric utility in the state. The Company is a wholly owned subsidiary of
12 UNS Energy Corporation ("UNS" or "Parent"), which is also based in
13 Tucson. According to the most recent Value Line Investment Survey
14 ("Value Line") report on the Company (Attachment D), TEP provides
15 electricity to approximately 404,000 customers in the greater Tucson
16 metropolitan area in Pima County, as well as parts of Cochise County in
17 southern Arizona. TEP's customer base is comprised of 42.00 percent
18 residential, 21.00 percent commercial, 34.00 percent industrial, and 3.00
19 percent other. TEP's generating sources include coal, 92.00 percent; and
20 natural gas, 8.00 percent.
21

22 ...
23

1 **Q. Has TEP elected to perform a reconstruction cost new less**
2 **depreciation study in this case?**

3 A. Yes. TEP elected to perform a reconstruction cost new less depreciation
4 ("RCND") study and is proposing a fair value rate base ("FVRB") that is an
5 average of the Company's original cost rate base ("OCRB") and its RCND
6 rate base for ratemaking purposes. For this reason RUCO is
7 recommending a fair value rate of return ("FVROR") to be applied to TEP's
8 FVRB.

9
10 **Q. Please explain your role in RUCO's analysis of TEP's Application.**

11 A. I reviewed TEP's Application and performed a cost of capital analysis to
12 determine both an original cost rate of return ("OCROR") and a fair value
13 rate of return ("FVROR") on the Company's invested capital. In addition to
14 my recommended capital structure, my direct testimony will present my
15 recommended cost of common equity (TEP has no preferred stock) and
16 my recommended costs of long-term and short-term debt. The
17 recommendations contained in this testimony are based on information
18 obtained from TEP's Application, responses to data requests, and from
19 market-based research that I conducted during my analysis.

20
21 **Q. What areas will you address in your testimony?**

22 A. I will address the cost of capital issues associated with the case and will
23 present RUCO's OCROR and FVROR recommendations.

1 **Q. Please identify the exhibits that you are sponsoring.**

2 A. I am sponsoring Schedules WAR-1 through WAR-9.

3
4 **SUMMARY OF TESTIMONY AND RECOMMENDATIONS**

5 **Q. Briefly summarize how your cost of capital testimony is organized.**

6 A. My cost of capital testimony is organized into six sections. First, the
7 introduction I have just presented and second, a summary of my testimony
8 that I am about to give. Third, I will present the findings of my cost of
9 equity capital analysis, which utilized both the discounted cash flow
10 ("DCF") method, and the capital asset pricing model ("CAPM"). These are
11 the two methods that RUCO and ACC Staff have consistently used for
12 calculating the cost of equity capital in rate case proceedings in the past,
13 and are the methodologies that the ACC has given the most weight to in
14 setting allowed rates of return for utilities that operate in the Arizona
15 jurisdiction. In this third section I will also provide a brief overview of the
16 current economic climate within which the Company is operating. Fourth,
17 I will discuss my recommended capital structure and my recommended
18 cost of long-term debt. Fifth, I will discuss my recommended weighted
19 average costs of capital for both my recommended OCROR and FVROR.
20 In the sixth and final section of my testimony, I will comment on the
21 Company's cost of capital testimony. Schedules WAR-1 through WAR-9
22 will provide support for my cost of capital analysis.

1 **Q. Please summarize the recommendations and adjustments that you**
2 **will address in your testimony.**

3 A. Based on the results of my analysis, I am making the following
4 recommendations:

5
6 Cost of Equity Capital – I am recommending that the Commission adopt a
7 10.00 percent cost of common equity. This 10.00 percent figure is 40
8 basis points higher than the range of results obtained in my cost of equity
9 analysis, and is 75 basis points lower than TEP's proposed 10.75 percent
10 cost of common equity.

11
12 Capital Structure – I am recommending that the Commission adopt TEP's
13 actual end of test year capital structure comprised of 43.50 percent
14 common equity, 55.97 percent long-term debt and 0.53 percent short-term
15 debt.

16
17 Cost of Debt – I am recommending that the Commission adopt a cost of
18 long-term debt of 5.22 percent and cost of short-term debt of 1.42 percent
19 which are the Company's actual end of test year costs of debt.

20
21 Original Cost Rate of Return – I am recommending that the ACC adopt a
22 7.28 percent weighted average cost of capital as the original cost rate of
23 return ("OCROR") for TEP. This 7.28 percent figure is the weighted cost

1 of RUCO's recommended costs of common equity and debt, and is 46
2 basis points lower than the 7.74 percent weighted average cost of capital
3 being proposed by the Company.

4
5 Fair Value Rate of Return – I am recommending that the Commission
6 adopt a fair value rate of return ("FVROR") of 5.11 percent which is my
7 recommended 7.28 percent OCROR minus an inflation adjustment of 2.17
8 percent. The method I have used to arrive at this 5.11 percent figure is
9 consistent with methods adopted by the Commission in prior rate case
10 proceedings¹ and meets the fair value requirement of the Arizona
11 Constitution.

12
13 **Q Why do you believe that RUCO's recommended 7.28 percent OCROR**
14 **and 5.11 percent FVROR are appropriate rates of return for TEP to**
15 **earn on its invested capital?**

16 **A.** Both the OCROR and FVROR figures that I am recommending for TEP
17 meet the criteria established in the landmark Supreme Court cases of
18 Bluefield Water Works & Improvement Co. v. Public Service Commission
19 of West Virginia (262 U.S. 679, 1923) and Federal Power Commission v.
20 Hope Natural Gas Company (320 U.S. 391, 1944). Simply stated, these
21 two cases affirmed that a public utility that is efficiently and economically

¹ UNS Electric, Inc., Decision No. 71914, dated September 30, 2010 and UNS Gas, Inc.,
Decision No. 71623, dated April 14, 2010

1 managed is entitled to a return on investment that instills confidence in its
2 financial soundness, allows the utility to attract capital, and also allows the
3 utility to perform its duty to provide service to ratepayers. The rate of
4 return adopted for the utility should also be comparable to a return that
5 investors would expect to receive from investments with similar risk.

6
7 The Hope decision allows for the rate of return to cover both the operating
8 expenses and the "capital costs of the business" which includes interest
9 on debt and dividend payment to shareholders. This is predicated on the
10 belief that, in the long run, a company that cannot meet its debt obligations
11 and provide its shareholders with an adequate rate of return will not
12 continue to supply adequate public utility service to ratepayers.

13
14 **Q. Do the Bluefield and Hope decisions indicate that a rate of return**
15 **sufficient to cover all operating and capital costs is guaranteed?**

16 **A.** No. Neither case *guarantees* a rate of return on utility investment. What
17 the Bluefield and Hope decisions *do allow*, is for a utility to be provided
18 with the *opportunity* to earn a reasonable rate of return on its investment.
19 That is to say that a utility, such as TEP, is provided with the opportunity to
20 earn an appropriate rate of return if the Company's management
21 exercises good judgment and manages its assets and resources in a
22 manner that is both prudent and economically efficient.

COST OF EQUITY CAPITAL

Q. What is your final recommended cost of equity capital for TEP?

A. I am recommending a cost of equity of 10.00 percent (before any inflation adjustment used to arrive at a FVROR). My recommended 10.00 percent cost of equity figure falls just above the high side of the range of results derived from my DCF and CAPM analyses, which utilized a sample of publicly traded electric companies.. The results of my DCF and CAPM analyses are summarized on page 3 of my Schedule WAR-1.

Discounted Cash Flow (DCF) Method

Q. Please explain the DCF method that you used to estimate the Company's cost of equity capital.

A. The DCF method employs a stock valuation model known as the constant growth valuation model, that bears the name of Dr. Myron J. Gordon (i.e. the Gordon model), the professor of finance who was responsible for its development. Simply stated, the DCF model is based on the premise that the current price of a given share of common stock is determined by the present value of all of the future cash flows that will be generated by that share of common stock. The rate that is used to discount these cash flows back to their present value is often referred to as the investor's cost of capital (i.e. the cost at which an investor is willing to forego other investments in favor of the one that he or she has chosen).

1 Another way of looking at the investor's cost of capital is to consider it from
2 the standpoint of a company that is offering its shares of stock to the
3 investing public. In order to raise capital, through the sale of common
4 stock, a company must provide a required rate of return on its stock that
5 will attract investors to commit funds to that particular investment. In this
6 respect, the terms "cost of capital" and "investor's required return" are one
7 in the same. For common stock, this required return is a function of the
8 dividend that is paid on the stock. The investor's required rate of return
9 can be expressed as the percentage of the dividend that is paid on the
10 stock (dividend yield) plus an expected rate of future dividend growth.
11 This is illustrated in mathematical terms by the following formula:

$$k = \frac{D_1}{P_0} + g$$

12 where: k = the required return (cost of equity, equity capitalization rate),

13 $\frac{D_1}{P_0}$ = the dividend yield of a given share of stock calculated

14 by dividing the expected dividend by the current market

15 price of the given share of stock, and

16 g = the expected rate of future dividend growth

17
18 This formula is the basis for the standard growth valuation model that I
19 used to determine the Company's cost of equity capital.
20

1 **Q. In determining the rate of future dividend growth for the Company,**
2 **what assumptions did you make?**

3 A. There are two primary assumptions regarding dividend growth that must
4 be made when using the DCF method. First, dividends will grow by a
5 constant rate into perpetuity, and second, the dividend payout ratio will
6 remain at a constant rate. Both of these assumptions are predicated on
7 the traditional DCF model's basic underlying assumption that a company's
8 earnings, dividends, book value and share growth all increase at the same
9 constant rate of growth into infinity. Given these assumptions, if the
10 dividend payout ratio remains constant, so does the earnings retention
11 ratio (the percentage of earnings that are retained by the company as
12 opposed to being paid out in dividends). This being the case, a
13 company's dividend growth can be measured by multiplying its retention
14 ratio (1 - dividend payout ratio) by its book return on equity. This can be
15 stated as $g = b \times r$.

16
17 **Q. Would you please provide an example that will illustrate the**
18 **relationship that earnings, the dividend payout ratio and book value**
19 **have with dividend growth?**

20 A. RUCO consultant Stephen Hill illustrated this relationship in a Citizens
21 Utilities Company 1993 rate case by using a hypothetical utility.²

22

² Citizens Utilities Company, Arizona Gas Division, Docket No. E-1032-93-111, Prepared Testimony, dated December 10, 1993, p. 25.

Table I

	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Growth</u>
Book Value	\$10.00	\$10.40	\$10.82	\$11.25	\$11.70	4.00%
Equity Return	10%	10%	10%	10%	10%	N/A
Earnings/Sh.	\$1.00	\$1.04	\$1.082	\$1.125	\$1.170	4.00%
Payout Ratio	0.60	0.60	0.60	0.60	0.60	N/A
Dividend/Sh	\$0.60	\$0.624	\$0.649	\$0.675	\$0.702	4.00%

Table I of Mr. Hill's illustration presents data for a five-year period on his hypothetical utility. In Year 1, the utility had a common equity or book value of \$10.00 per share, an investor-expected equity return of ten percent, and a dividend payout ratio of sixty percent. This results in earnings per share of \$1.00 (\$10.00 book value x 10 percent equity return) and a dividend of \$0.60 (\$1.00 earnings/sh. x 0.60 payout ratio) during Year 1. Because forty percent (1 - 0.60 payout ratio) of the utility's earnings are retained as opposed to being paid out to investors, book value increases to \$10.40 in Year 2 of Mr. Hill's illustration. Table I presents the results of this continuing scenario over the remaining five-year period.

The results displayed in Table I demonstrate that under "steady-state" (i.e. constant) conditions, book value, earnings and dividends all grow at the same constant rate. The table further illustrates that the dividend growth rate, as discussed earlier, is a function of (1) the internally generated

funds or earnings that are retained by a company to become new equity, and (2) the return that an investor earns on that new equity. The DCF dividend growth rate, expressed as $g = b \times r$, is also referred to as the internal or sustainable growth rate.

Q. If earnings and dividends both grow at the same rate as book value, shouldn't that rate be the sole factor in determining the DCF growth rate?

A. No. Possible changes in the expected rate of return on either common equity or the dividend payout ratio make earnings and dividend growth by themselves unreliable. This can be seen in the continuation of Mr. Hill's illustration on a hypothetical utility.

Table II

	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>	<u>Growth</u>
Book Value	\$10.00	\$10.40	\$10.82	\$11.47	\$12.158	5.00%
Equity Return	10%	10%	15%	15%	15%	10.67%
Earnings/Sh	\$1.00	\$1.04	\$1.623	\$1.720	\$1.824	16.20%
Payout Ratio	0.60	0.60	0.60	0.60	0.60	N/A
Dividend/Sh	\$0.60	\$0.624	\$0.974	\$1.032	\$1.094	16.20%

1 In the example displayed in Table II, a sustainable growth rate of four
2 percent³ exists in Year 1 and Year 2 (as in the prior example). In Year 3,
3 Year 4 and Year 5, however, the sustainable growth rate increases to six
4 percent.⁴ If the hypothetical utility in Mr. Hill's illustration were expected to
5 earn a fifteen-percent return on common equity on a continuing basis,
6 then a six percent long-term rate of growth would be reasonable.
7 However, the compound growth rate for earnings and dividends, displayed
8 in the last column, is 16.20 percent. If this rate was to be used in the
9 DCF model, the utility's return on common equity would be expected to
10 increase by fifty percent every five years, $[(15 \text{ percent} \div 10 \text{ percent}) - 1]$.
11 This is clearly an unrealistic expectation.

12
13 Although it is not illustrated in Mr. Hill's hypothetical example, a change in
14 only the dividend payout ratio will eventually result in a utility paying out
15 more in dividends than it earns. While it is not uncommon for a utility in
16 the real world to have a dividend payout ratio that exceeds one hundred
17 percent on occasion, it would be unrealistic to expect the practice to
18 continue over a sustained long-term period of time.

19
20 ...
21

³ $[(\text{Year 2 Earnings/Sh} - \text{Year 1 Earnings/Sh}) \div \text{Year 1 Earnings/Sh}] = [(\$1.04 - \$1.00) \div \$1.00] = [\$0.04 \div \$1.00] = \underline{4.00\%}$

⁴ $[(1 - \text{Payout Ratio}) \times \text{Rate of Return}] = [(1 - 0.60) \times 15.00\%] = 0.40 \times 15.00\% = \underline{6.00\%}$

1 **Q. Other than the retention of internally generated funds, as illustrated**
2 **in Mr. Hill's hypothetical example, are there any other sources of new**
3 **equity capital that can influence an investor's growth expectations**
4 **for a given company?**

5 A. Yes, a company can raise new equity capital externally. The best
6 example of external funding would be the sale of new shares of common
7 stock. This would create additional equity for the issuer and is often the
8 case with utilities that are either in the process of acquiring smaller
9 systems or providing service to rapidly growing areas.

10
11 **Q. How does external equity financing influence the growth**
12 **expectations held by investors?**

13 A. Rational investors will put their available funds into investments that will
14 either meet or exceed their given cost of capital (i.e. the return earned on
15 their investment). In the case of a utility, the book value of a company's
16 stock usually mirrors the equity portion of its rate base (the utility's earning
17 base). Because regulators allow utilities the opportunity to earn a
18 reasonable rate of return on rate base, an investor would take into
19 consideration the effect that a change in book value would have on the
20 rate of return that he or she would expect the utility to earn. If an investor
21 believes that a utility's book value (i.e. the utility's earning base) will
22 increase, then he or she would expect the return on the utility's common
23 stock to increase. If this positive trend in book value continues over an

1 extended period of time, an investor would have a reasonable expectation
2 for sustained long-term growth.
3

4 **Q. Please provide an example of how external financing affects a**
5 **utility's book value of equity.**

6 A. As I explained earlier, one way that a utility can increase its equity is by
7 selling new shares of common stock on the open market. If these new
8 shares are purchased at prices that are higher than those shares sold
9 previously, the utility's book value per share will increase in value. This
10 would increase both the earnings base of the utility and the earnings
11 expectations of investors. However, if new shares sold at a price below
12 the pre-sale book value per share, the after-sale book value per share
13 declines in value. If this downward trend continues over time, investors
14 might view this as a decline in the utility's sustainable growth rate and will
15 have lower expectations regarding growth. Using this same logic, if a new
16 stock issue sells at a price per share that is the same as the pre-sale book
17 value per share, there would be no impact on either the utility's earnings
18 base or investor expectations.
19
20
21

22 ...
23

1 **Q. Please explain how the external component of the DCF growth rate is**
2 **determined.**

3 A. In his book, *The Cost of Capital to a Public Utility*,⁵ Dr. Gordon (the
4 individual responsible for the development of the DCF or constant growth
5 model) identified a growth rate that includes both expected internal and
6 external financing components. The mathematical expression for Dr.
7 Gordon's growth rate is as follows:

$$g = (br) + (sv)$$

10 where: g = DCF expected growth rate,
11 b = the earnings retention ratio,
12 r = the return on common equity,
13 s = the fraction of new common stock sold that
14 accrues to a current shareholder, and
15 v = funds raised from the sale of stock as a fraction
16 of existing equity.

17 and $v = 1 - [(BV) \div (MP)]$

18 where: BV = book value per share of common stock, and
19 MP = the market price per share of common stock.

20
21 ...
22

⁵ Gordon, M.J., *The Cost of Capital to a Public Utility*, East Lansing, MI: Michigan State University, 1974, pp. 30-33.

1 **Q. Did you include the effect of external equity financing on long-term**
2 **growth rate expectations in your analysis of expected dividend**
3 **growth for the DCF model?**

4 A. Yes. The external growth rate estimate (sv) is displayed on Page 1 of
5 Schedule WAR-4, where it is added to the internal growth rate estimate
6 (br) to arrive at a final sustainable growth rate estimate.

7
8 **Q. Please explain why your calculation of external growth on page 2 of**
9 **Schedule WAR-4, is the current market-to-book ratio averaged with**
10 **1.0 in the equation $[(M \div B) + 1] \div 2$.**

11 A. The market price of a utility's common stock will tend to move toward book
12 value, or a market-to-book ratio of 1.0, if regulators allow a rate of return
13 that is equal to the cost of capital (one of the desired effects of regulation).
14 As a result of this situation, I used $[(M \div B) + 1] \div 2$ as opposed to the
15 current market-to-book ratio by itself to represent investor's expectations
16 that, in the future, a given utility will achieve a market-to-book ratio of 1.0.

17
18 **Q. Has the Commission ever adopted a cost of capital estimate that**
19 **included this assumption?**

20 A. Yes. In a prior Southwest Gas Corporation rate case⁶, the Commission
21 adopted the recommendations of ACC Staff's cost of capital witness,
22 Stephen Hill, who I noted earlier in my testimony. In that case, Mr. Hill

⁶ Decision No. 68487, Dated February 23, 2006 (Docket No. G-01551A-04-0876)

1 used the same methods that I have used in arriving at the inputs for the
2 DCF model. His final recommendation for Southwest Gas Corporation
3 was largely based on the results of his DCF analysis, which incorporated
4 the same valid market-to-book ratio assumption that I have used
5 consistently in the DCF model as a cost of capital witness for RUCO.

6
7 **Q. How did you develop your dividend growth rate estimate?**

8 A. I analyzed data on a proxy group comprised of twenty publicly traded
9 electric service providers.

10
11 **Q. Why did you use a proxy group methodology as opposed to a direct
12 analysis of the Company?**

13 A. One of the problems in performing this type of analysis is that the utility
14 applying for a rate increase is not always a publicly traded company.
15 Although TEP's parent company is publicly-traded on the NYSE, TEP is
16 not. Because of this situation, I used the aforementioned proxy that
17 includes twenty electric utilities with similar risk characteristics as TEP in
18 order to derive a cost of common equity for the Company.

19
20 **Q. Are there any other advantages to the use of a proxy?**

21 A. Yes. As I noted earlier, the U.S. Supreme Court ruled in the Hope
22 decision that a utility is entitled to earn a rate of return that is
23 commensurate with the returns on investments of other firms with

1 comparable risk. The proxy technique that I have used derives that rate of
2 return. One other advantage to using a sample of companies is that it
3 reduces the possible impact that any undetected biases, anomalies, or
4 measurement errors may have on the DCF growth estimate.

5
6 **Q. What criteria did you use in selecting the electric utilities included in**
7 **your proxy for TEP?**

8 A. Each of the thirteen electric utilities in my sample are tracked in the Value
9 Line Investment Survey's ("Value Line") Electric Utility industry segment.
10 Value Line follows electric utilities on a regional basis and issues quarterly
11 updates on electric utilities located in the eastern, central and western
12 portions of the U.S. All of the companies in the proxy are engaged in the
13 provision of regulated electric services. Attachment A of my testimony
14 contains Value Line's most recent evaluation on each of the companies
15 that I included in the electric proxy group which I used for my cost of
16 common equity analysis.

17
18 **Q. Are these the same electric providers included in the proxy used by**
19 **TEP's cost of equity witness?**

20 A. Yes. These are the same electric providers used by Mr. John J. Reed, the
21 Company's' cost of capital witness.

1 **Q. Please explain your DCF growth rate calculations for the sample**
2 **electric providers used in your proxy.**

3 A. Schedule WAR-5 provides retention ratios, returns on book equity, internal
4 growth rates, book values per share, numbers of shares outstanding, and
5 the compounded share growth for each of the electric companies included
6 in my sample for an historical 5-year observation period from the
7 beginning of 2007 to the end of 2011. Schedule WAR-5 also includes
8 Value Line's projected 2012, 2013 and 2015-17 values for the retention
9 ratio, equity return, book value per share growth rate, and number of
10 shares outstanding for the sample electric companies.

11
12 **Q. Please describe how you used the information displayed in Schedule**
13 **WAR-5 to estimate each comparable utility's dividend growth rate.**

14 A. In explaining my analysis, I will use American Electric Power Company,
15 Inc. (NYSE symbol AEP) as an example. The first dividend growth
16 component that I evaluated was the internal growth rate. I used the "b x r"
17 formula (described on pages 10 through 13 of my testimony) to multiply
18 AEP's earned return on common equity by its earnings retention ratio for
19 each year in the 2007 to 2011 observation period to derive the utility's
20 annual internal growth rates. I used the mean average of this five-year
21 period as a benchmark against which I compared the projected growth
22 rate trends provided by Value Line. Because an investor is more likely to
23 be influenced by recent growth trends, as opposed to historical averages,

1 the five-year mean noted earlier was used only as a benchmark figure. As
2 shown on Schedule WAR-5, Page 1, AEP's average internal growth rate
3 of 4.27 percent over the 2007 to 2011 time frame reflects an up and down
4 pattern of growth that ranged from a high of 5.10 percent during 2007 and
5 2008 to a low of 3.12 percent during 2010. Value Line is predicting that
6 growth will fall from 4.21 percent in 2011 to 3.87 percent in 2012 and
7 continue to decline to 3.66 percent by the end of the 2015-17 time frame.
8 After weighing Value Line's projections on earnings and dividend growth, I
9 believe that a 3.80 percent rate of internal growth is within the realm of
10 possibility for AEP (Schedule WAR-4, Page 1 of 2).

11
12 **Q. Please continue with the external growth rate component portion of**
13 **your analysis.**

14 **A.** Schedule WAR-5 demonstrates that the number of shares outstanding for
15 AEP increased from 400.43 million to 483.42 million from 2007 to the end
16 of the observation period in 2011. Value Line is predicting that this level
17 will increase from 486.00 million in 2012 to 500.00 million by the end of
18 2017. Based on this data, I believe that a 0.70 percent growth in shares is
19 not unreasonable for AEP (Page 2 of Schedule WAR-4). My final dividend
20 growth rate estimate for AEP is 3.92 percent (3.80 percent internal growth
21 + 0.12 percent external growth – as calculated on Page 2 of Schedule
22 WAR 4) and is shown on Page 1 of Schedule WAR-4.

1 **Q. What is the average DCF dividend growth rate estimate for your**
2 **sample utilities?**

3 A. The average DCF dividend growth rate estimate for my sample is 5.47
4 percent as displayed on page 1 of Schedule WAR-4.

5
6 **Q. How does your average dividend growth rate estimates on your**
7 **sample companies compare to the growth rate data published by**
8 **Value Line and other analysts?**

9 A. Schedule WAR-6 compares my growth estimates with the five-year
10 projections of analysts at both Value Line and Zacks Investment
11 Research, Inc. ("Zacks") (Attachment B). My 5.47 percent estimate is 40
12 basis points lower than Zacks' average long-term EPS projection of 5.87
13 percent and is 24 basis points lower than Value Line's growth projection of
14 5.71 percent (which is an average of EPS, DPS and BVPS). My 5.47
15 percent estimate is 336 basis points higher than the 2.11 percent average
16 of Value Line's historical growth results and 100 basis points higher than
17 the 4.47 percent average of the growth data published by both Value Line
18 and Zacks. My 5.47 percent growth estimate is 281 basis points higher
19 than Value Line's 2.66 percent 5-year compound historical average of
20 EPS, DPS and BVPS. On balance, I would say my 5.47 percent growth
21 estimate, derived from Value Line data, is not out of line with the growth
22 projections that are available to the investing public.

1 **Q. How did you calculate the dividend yields displayed in Schedule**
2 **WAR-3?**

3 A. I used the estimated annual dividends of my sample companies for the
4 next twelve-month period that appeared in Value Line's most recent
5 Ratings and Reports quarterly updates on the electric utility industry. I
6 then divided those figures by the eight-week average daily adjusted
7 closing price per share of the appropriate utility's common stock. The
8 eight-week observation period ran from October 9, 2012 to November 30,
9 2012, and the average dividend yield was 4.13 percent as exhibited on
10 Schedule WAR-3.

11
12 **Q. Based on the results of your DCF analysis, what is your cost of**
13 **equity capital estimate for the electric companies included in your**
14 **sample?**

15 A. As shown on Schedule WAR-2, the cost of equity capital derived from my
16 DCF analysis is 9.60 percent for the electric utilities included in my sample
17 which is 547 basis points higher than the current 4.13 percent yield on a
18 safer Baa/BBB-rated utility bond (Attachment C).

19
20
21
22 ...
23

Capital Asset Pricing Model (CAPM) Method

Q. Please explain the theory behind CAPM and why you decided to use it as an equity capital valuation method in this proceeding.

A. CAPM is a mathematical tool that was developed during the early 1960's by William F. Sharpe⁷, the Timken Professor Emeritus of Finance at Stanford University, who shared the 1990 Nobel Prize in Economics for research that eventually resulted in the CAPM model. CAPM is used to analyze the relationships between rates of return on various assets and risk as measured by beta.⁸ In this regard, CAPM can help an investor to determine how much risk is associated with a given investment so that he or she can decide if that investment meets their individual preferences. Finance theory has always held that as the risk associated with a given investment increases, so should the expected rate of return on that investment and vice versa. According to CAPM theory, risk can be classified into two specific forms: nonsystematic or diversifiable risk, and systematic or non-diversifiable risk. While nonsystematic risk can be virtually eliminated through diversification (i.e. by including stocks of various companies in various industries in a portfolio of securities), systematic risk, on the other hand, cannot be eliminated by diversification.

⁷ William F. Sharpe, "A Simplified Model of Portfolio Analysis," Management Science, Vol. 9, No. 2 (January 1963), pp. 277-93.

⁸ Beta is defined as an index of volatility, or risk, in the return of an asset relative to the return of a market portfolio of assets. It is a measure of systematic or non-diversifiable risk. The returns on a stock with a beta of 1.0 will mirror the returns of the overall stock market. The returns on stocks with betas greater than 1.0 are more volatile or riskier than those of the overall stock market; and if a stock's beta is less than 1.0, its returns are less volatile or riskier than the overall stock market.

Thus, systematic risk is the only risk of importance to investors. Simply stated, the underlying theory behind CAPM is that the expected return on a given investment is the sum of a risk-free rate of return plus a market risk premium that is proportional to the systematic (non-diversifiable risk) associated with that investment. In mathematical terms, the formula is as follows:

$$k = r_f + [\beta (r_m - r_f)]$$

where: k = the expected return of a given security,
 r_f = risk-free rate of return,
 β = beta coefficient, a statistical measurement of a
 security's systematic risk,
 r_m = average market return (e.g. S&P 500), and
 $r_m - r_f$ = market risk premium.

Q. What types of financial instruments are generally used as a proxy for the risk-free rate of return in the CAPM model?

A. Generally speaking, the yields of U.S. Treasury instruments are used by analysts as a proxy for the risk-free rate of return component.

...

1 **Q. Please explain why U.S. Treasury instruments are regarded as a**
2 **suitable proxy for the risk-free rate of return?**

3 A. As citizens and investors, we would like to believe that U.S. Treasury
4 securities (which are backed by the full faith and credit of the United
5 States Government) pose no threat of default no matter what their maturity
6 dates are. However, a comparison of various Treasury instruments
7 (Attachment C) will reveal that those with longer maturity dates do have
8 slightly higher yields. Treasury yields are comprised of two separate
9 components,⁹ a real rate of interest (believed to be approximately 2.00
10 percent) and an inflationary expectation. When the real rate of interest is
11 subtracted from the total treasury yield, all that remains is the inflationary
12 expectation. Because increased inflation represents a potential capital
13 loss, or risk, to investors, a higher inflationary expectation by itself
14 represents a degree of risk to an investor. Another way of looking at this
15 is from an opportunity cost standpoint. When an investor locks up funds in
16 long-term T-Bonds, compensation must be provided for future investment
17 opportunities foregone. This is often described as maturity or interest rate
18 risk and it can affect an investor adversely if market rates increase before
19 the instrument matures (a rise in interest rates would decrease the value
20 of the debt instrument). As discussed earlier in the DCF portion of my

⁹ As a general rule of thumb, there are three components that make up a given interest rate or rate of return on a security: the real rate of interest, an inflationary expectation, and a risk premium. The approximate risk premium of a given security can be determined by simply subtracting a 91-day T-Bill rate from the yield on the security.

1 testimony, this compensation translates into higher rates of returns to the
2 investor.

3
4 **Q. What security did you use for a risk-free rate of return in your CAPM**
5 **analysis?**

6 A. I used an eight-week average of the yield on a 30-year U.S. Treasury
7 instrument. The yields were published in Value Line's Selection and
8 Opinion publication dated October 12, 2012 through November 30, 2012
9 (Attachment C). This resulted in a risk-free (r_f) rate of return of 2.86
10 percent.

11
12 **Q. Why did you use the yield on a 30-year year U.S. Treasury instrument**
13 **as opposed to a short-term T-Bill?**

14 A. While a shorter term instrument, such as a 91-day T-Bill, presents the
15 lowest possible total risk to an investor, a good argument can be made
16 that the yield on an instrument that matches the investment period of the
17 asset being analyzed in the CAPM model should be used as the risk-free
18 rate of return. Since utilities in Arizona generally file for rates every three
19 to five years, the yield on a 5-year U.S. Treasury Instrument more closely
20 matches the investment period or, in the case of regulated utilities, the
21 period that new rates will be in effect. In prior rate cases I have relied on
22 the yields of the 5-year Treasury instrument, however for the sake of
23 argument in this case, I have used the higher yield of the longer term 30-

1 year Treasury bond. As I will discuss later in my testimony, the yields of
2 long-term U.S. Treasury instruments are currently falling as a result of
3 recent actions being undertaken by the U.S. Federal Reserve to stimulate
4 the U.S. economy.

5
6 **Q. How did you calculate the market risk premium used in your CAPM**
7 **analysis?**

8 A. I used both a geometric and an arithmetic mean of the historical total
9 returns on the S&P 500 index from 1926 to 2011 as the proxy for the
10 market rate of return (r_m). For the risk-free portion of the risk premium
11 component (r_f), I used the geometric mean of the total returns of long-term
12 government bonds for the same eighty-four year period. The market risk
13 premium ($r_m - r_f$) that results by using the geometric mean of these inputs
14 is 4.10 percent ($9.80\% - 5.70\% = \underline{4.10\%}$). The market risk premium that
15 results by using the arithmetic mean calculation is 5.70 percent ($11.80\% -$
16 $6.10\% = \underline{5.70\%}$).

17
18 **Q. How did you select the beta coefficients that were used in your**
19 **CAPM analysis?**

20 A. The beta coefficients (β), for the individual utilities used in my proxy were
21 calculated by Value Line. The betas were published in the most recent
22 Value Line quarterly updates on the electric utility industry that were
23 available prior to the filing date of my testimony. Value Line calculates its

1 betas by using a regression analysis between weekly percentage changes
2 in the market price of the security being analyzed and weekly percentage
3 changes in the NYSE Composite Index over a five-year period. The betas
4 are then adjusted by Value Line for their long-term tendency to converge
5 toward 1.00. The beta coefficients for the electric companies included in
6 my sample ranged from 0.65 to 0.95 with an average beta of 0.72.

7
8 **Q. What are the results of your CAPM analysis?**

9 A. As shown on pages 1 and 2 of Schedule WAR-7, my CAPM calculation
10 using a geometric mean to calculate the risk premium results in an
11 average expected return of 5.82 percent. My calculation using an
12 arithmetic mean results in an average expected return of 6.98 percent.
13 The results obtained from my CAPM analysis exceed the current 4.13
14 percent yield on a Baa/BBB-rated utility bond (Attachment C) by 169 to
15 285 basis points.

16
17 **Q. Please summarize the results derived under each of the**
18 **methodologies presented in your testimony.**

19 A. The following is a summary of the cost of equity capital derived under
20 each methodology used:

21
22 ...

<u>METHOD</u>	<u>RESULTS</u>
DCF	9.60%
CAPM	5.82% – 6.98%

Based on these results, my best estimate of an appropriate range for a cost of common equity for the Company is 5.82 percent to 9.60 percent. My final recommended cost of common equity figure is 10.00 percent which is 40 basis points above the high end of the range of estimates shown above (Schedule WAR-1, Page 3) and 587 basis points higher than the current 4.13 percent yield on a safer Baa/BBB-rated utility bond. My higher 10.00 percent recommendation takes into account the lower level of equity in TEP's capital structure when compared to the level of equity in the average capital structures of the electric companies included in my proxy (a point that I will discuss later in my testimony).

As I will discuss in more detail in the next section of my testimony, my final estimate also takes into consideration current interest rates (as the cost of equity moves in the same direction as interest rates), the current state of the national economy – which could be sliding back into recession. My final estimate also takes into consideration the U.S. Federal Reserve's recent decisions not to raise interest rates at least through mid-2015.¹⁰ I also took into consideration information on Arizona's economy and current

¹⁰ U.S. Federal Reserve press release dated October 24, 2012:
<http://www.federalreserve.gov/newsevents/press/monetary/20121024a.htm>

1 rate of unemployment in making my final cost of equity estimate. My final
2 estimate also falls within the range of projected returns on book common
3 equity that Value Line is projecting for the electric utility industry
4 (Attachment A).

5
6 **Q. How does your recommended cost of equity capital compare with**
7 **the cost of equity capital proposed by the Company?**

8 A. The 10.75 percent cost of equity capital proposed by the Company is 75
9 basis points higher than the 10.00 percent cost of equity capital that I am
10 recommending.

11
12 **Current Economic Environment**

13 **Q. Please explain why it is necessary to consider the current economic**
14 **environment when performing a cost of equity capital analysis for a**
15 **regulated utility.**

16 A. Consideration of the economic environment is necessary because trends
17 in interest rates, present and projected levels of inflation, and the overall
18 state of the U.S. economy determine the rates of return that investors earn
19 on their invested funds. Each of these factors represent potential risks
20 that must be weighed when estimating the cost of equity capital for a
21 regulated utility and are, most often, the same factors considered by
22 individuals who are also investing in non-regulated entities.

1 **Q. Please describe your analysis of the current economic environment.**

2 A. My analysis begins with a review of the economic events that have
3 occurred between 1990 and the present in order to provide a background
4 on how we got to where we are now. It also describes how the Board of
5 Governors of the Federal Reserve System ("Federal Reserve" or "Fed")
6 and its Federal Open Market Committee ("FOMC") used its interest rate-
7 setting authority to stimulate the economy by cutting interest rates during
8 recessionary periods and by raising interest rates to control inflation during
9 times of robust economic growth. Schedule WAR-8 displays various
10 economic indicators and other data that I will refer to during this portion of
11 my testimony.

12
13 In 1991, as measured by the most recently revised annual change in
14 gross domestic product ("GDP"), the U.S. economy experienced a rate of
15 growth of negative 0.20 percent. This decline in GDP marked the
16 beginning of a mild recession that ended sometime before the end of the
17 first half of 1992. Reacting to this situation, the Federal Reserve, then
18 chaired by noted economist Alan Greenspan, lowered its benchmark
19 federal funds rate¹¹ in an effort to further loosen monetary constraints - an
20 action that resulted in lower interest rates.

¹¹ This is the interest rate charged by banks with excess reserves at a Federal Reserve district bank to banks needing overnight loans to meet reserve requirements. The federal funds rate is the most sensitive indicator of the direction of interest rates, since it is set daily by the market, unlike the prime rate and the discount rate, which are periodically changed by banks and by the Federal Reserve Board, respectively.

1 During this same period, the nation's major money center banks followed
2 the Federal Reserve's lead and began lowering their interest rates as well.
3 By the end of the fourth quarter of 1993, the prime rate (the rate charged
4 by banks to their best customers) had dropped to 6.00 percent from a
5 1990 level of 10.01 percent. In addition, the Federal Reserve's discount
6 rate on loans to its member banks had fallen to 3.00 percent and short-
7 term interest rates had declined to levels that had not been seen since
8 1972.

9
10 Although GDP increased in 1992 and 1993, the Federal Reserve took
11 steps to increase interest rates beginning in February of 1994, in order to
12 keep inflation under control. By the end of 1995, the Federal discount rate
13 had risen to 5.21 percent. Once again, the banking community followed
14 the Federal Reserve's moves. The Fed's strategy, during this period, was
15 to engineer a "soft landing." That is to say that the Federal Reserve
16 wanted to foster a situation in which economic growth would be stabilized
17 without incurring either a prolonged recession or runaway inflation.

18
19 **Q. Did the Federal Reserve achieve its goals during this period?**

20 **A.** Yes. The Fed's strategy of decreasing interest rates to stimulate the
21 economy worked. The annual change in GDP began an upward trend in
22 1992. A change of 4.50 percent and 4.20 percent were recorded at the
23 end of 1997 and 1998 respectively. Based on daily reports that were

1 presented in the mainstream print and broadcast media during most of
2 1999, there appeared to be little doubt among both economists and the
3 public at large that the U.S. was experiencing a period of robust economic
4 growth highlighted by low rates of unemployment and inflation. Investors,
5 who believed that technology stocks and Internet company start-ups (with
6 little or no history of earnings) had high growth potential, purchased these
7 types of issues with enthusiasm. These types of investors, who exhibited
8 what former Chairman Greenspan described as "irrational exuberance,"
9 pushed stock prices and market indexes to all time highs from 1997 to
10 2000. Over the next ten years, the FOMC continued to stimulate the
11 economy and keep inflation in check by raising and lowering the federal
12 funds rate.

13
14 **Q. How did the U.S. economy fare between 2001 and 2007?**

15 **A.** The U.S. economy entered into a recession near the end of the first
16 quarter of 2001. The bullish trend, which had characterized the last half of
17 the 1990's, had already run its course sometime during the third quarter of
18 2000. Disappointing economic data releases, since the beginning of
19 2001, preceded the September 11, 2001 terrorist attacks on the World
20 Trade Center and the Pentagon which are now regarded as a defining
21 point during this economic slump. From January 2001 to June 2003 the
22 Federal Reserve cut interest rates a total of thirteen times in order to
23 stimulate growth. During this period, the federal funds rate fell from 6.50

1 percent to 1.00 percent. The FOMC reversed this trend on June 29, 2004
2 and raised the federal funds rate 25 basis points to 1.25 percent. From
3 June 29, 2004 to January 31, 2006, the FOMC raised the federal funds
4 rate thirteen more times to a level of 4.50 percent during a period in which
5 the economic picture turned considerably brighter as both Inflation and
6 unemployment fell, wages increased and the overall economy, despite
7 continued problems in housing, grew briskly.¹²

8
9 The FOMC's January 31, 2006 meeting marked the final appearance of
10 Alan Greenspan, who had presided over the rate setting body for a total of
11 eighteen years. On that same day, Greenspan's successor, Ben
12 Bernanke, the former chairman of the President's Council of Economic
13 Advisers, and a former Fed governor under Greenspan from 2002 to
14 2005, was confirmed by the U.S. Senate to be the new Federal Reserve
15 chief. As expected by Fed watchers, Chairman Bernanke picked up
16 where his predecessor left off and increased the federal funds rate by 25
17 basis points during each of the next three FOMC meetings for a total of
18 seventeen consecutive rate increases since June 2004, and raising the
19 federal funds rate to a level of 5.25 percent. The Fed's rate increase
20 campaign finally came to a halt at the FOMC meeting held on August 8,
21 2006, when the FOMC decided not to raise rates. Once again, the Fed
22 managed to engineer a soft landing.

¹² Henderson, Nell, "Bullish on Bernanke" The Washington Post, January 30, 2007.

1 **Q. What has been the state of the economy since 2007?**

2 A. Reports in the mainstream financial press during the majority of 2007
3 reflected the view that the U.S. economy was slowing as a result of a
4 worsening situation in the housing market and higher oil prices. The
5 overall outlook for the economy was one of only moderate growth at best.
6 Also during this period the Fed's key measure of inflation began to exceed
7 the rate setting body's comfort level.

8
9 On August 7, 2007, the beginning of what is now being referred to as the
10 Great Recession; the FOMC decided not to increase or decrease the
11 federal funds rate for the ninth straight time and left its target rate
12 unchanged at 5.25 percent.¹³ At the time of the Fed's decision, analysts
13 speculated that a rate cut over the next several months was unlikely given
14 the Fed's concern that inflation would fail to moderate. However, during
15 this same period, evidence of an even slower economy and a possible
16 recession was beginning to surface. Within days of the Fed's decision to
17 stand pat on rates, a borrowing crisis rooted in a deterioration of the
18 market for subprime mortgages, and securities linked to them, forced the
19 Fed to inject \$24 billion in funds (raised through its open market
20 operations) into the credit markets.¹⁴ By Friday, August 17, 2007, after a

¹³ Ip, Greg, "Markets Gyrate As Fed Straddles Inflation, Growth" The Wall Street Journal, August 8, 2007

¹⁴ Ip, Greg, "Fed Enters Market To Tamp Down Rate" The Wall Street Journal, August 9, 2007

1 turbulent week on Wall Street, the Fed made the decision to lower its
2 discount rate (i.e. the rate charged on direct loans to banks) by 50 basis
3 points, from 6.25 percent to 5.75 percent, and took steps to encourage
4 banks to borrow from the Fed's discount window in order to provide
5 liquidity to lenders. According to an article that appeared in the August 18,
6 2007 edition of The Wall Street Journal,¹⁵ the Fed had used all of its tools
7 to restore normalcy to the financial markets. If the markets failed to settle
8 down, the Fed's only weapon left was to cut the Federal Funds rate –
9 possibly before the next FOMC meeting scheduled on September 18,
10 2007.

11
12 **Q. Did the Fed cut rates as a result of the subprime mortgage borrowing**
13 **crises?**

14 A. Yes. At its regularly scheduled meeting on September 18, 2007, the
15 FOMC surprised the investment community and cut both the federal funds
16 rate and the discount rate by 50 basis points (25 basis points more than
17 what was anticipated). This brought the federal funds rate down to a level
18 of 4.75 percent. The Fed's action was seen as an effort to curb the
19 aforementioned slowdown in the economy. Over the course of the next
20 four months, the FOMC reduced the Federal funds rate by a total 175
21 basis points to a level of 3.00 percent – mainly as a result of concerns that
22 the economy was slipping into a recession. This included a 75 basis point

¹⁵ Ip, Greg, Robin Sidel and Randall Smith, "Fed Offers Banks Loans Amid Crises" The Wall Street Journal, August 9, 2007

1 reduction that occurred one week prior to the FOMC's meeting on January
2 29, 2008.

3
4 **Q. What actions has the Fed taken in regard to interest rates since the**
5 **beginning of 2008?**

6 A. The Fed made two more rate cuts which included a 75 basis point
7 reduction in the federal funds rate on March 18, 2008 and an additional 25
8 basis point reduction on April 30, 2008. The Fed's decision to cut rates
9 was based on its belief that the slowing economy was a greater concern
10 than the current rate of inflation (which the majority of FOMC members
11 believed would moderate during the economic slowdown).¹⁶ As a result of
12 the Fed's actions, the federal funds rate was reduced to a level of 2.00
13 percent. From April 30, 2008 through September 16, 2008, the Fed took
14 no further action on its key interest rate. However, the days before and
15 after the Fed's September 16, 2008 meeting saw longstanding Wall Street
16 firms such as Lehman Brothers, Merrill Lynch and AIG failing as a result of
17 their subprime holdings. By the end of the week, the Bush administration
18 had announced plans to deal with the deteriorating financial condition
19 which had now become a worldwide crisis. The administrations actions
20 included former Treasury Secretary Henry Paulson's request to Congress
21 for \$700 billion to buy distressed assets as part of a plan to halt what has

¹⁶ Ip, Greg, "Credit Worries Ease as Fed Cuts, Hints at More Relief" The Wall Street Journal,
March 19, 2008

1 been described as the worst financial crisis since the 1930's¹⁷. Amidst this
2 turmoil, the Fed made the decision to cut the federal funds rate by another
3 50 basis points in a coordinated move with foreign central banks on
4 October 8, 2008. This was followed by another 50 basis point cut during
5 the regular FOMC meeting on October 29, 2008. At the time of this
6 writing, the federal funds target rate now stands at 0.25 percent, the result
7 of a 75 basis point cut announced on December 16, 2008.

8
9 **Q. Has the Fed taken any further action to stimulate the economy?**

10 Yes. At the close of the FOMC's September 2011 meeting the Fed
11 announced its decision to implement a plan that resembles a 1961
12 Federal Reserve program known as "Operation Twist".¹⁸ Under this plan,
13 the Fed would sell \$400 billion in Treasury securities that mature within
14 three years. The proceeds from these sales would then be reinvested into
15 securities that mature in six to 30 years. This action would significantly
16 alter the balance of the Fed's holdings toward long-term securities. In
17 addition to selling off its shorter term Treasury holdings, the proceeds from
18 the Fed's maturing mortgage-backed securities would be reinvested in
19 other mortgage backed securities. Since 2010, the Fed had been
20 reinvesting that money into Treasury bonds, shrinking its mortgage

¹⁷ Soloman, Deborah, Michael R. Crittenden and Damian Paletta, "U.S. Bailout Plan Calms Markets, But Struggle Looms Over Details" The Wall Street Journal, September 20, 2008

¹⁸ Hilsenrath, Jon and Luca Di Leo "Fed Launches New Stimulus" The Wall Street Journal, September 22, 2011

1 portfolio. The overall goal of the Fed's plan was to reduce long-term
2 interest rates in the hope of boosting investment and spending and
3 provide a shot in the arm to the beleaguered housing sector of the
4 economy.

5
6 **Q. Has there been any noticeable drop in long-term rates since the Fed**
7 **announced its plan to purchase longer term Treasury instruments?**

8 A. Yes. The yield on the 30-year Treasury bond has fallen from 2.88 percent
9 to 2.82 percent since the latter part of November 2011 (Attachment C).

10
11 **Q. What is the current rate of inflation in the U.S.?**

12 A. As can be seen on Schedule WAR-8, the current rate of inflation, as
13 measured by the consumer price index, is at 2.20 percent according to
14 information provided by the U.S. Department of Labor's Bureau of Labor
15 Statistics.¹⁹

16
17 **Q. Has the Fed raised interest rates in anticipation of higher inflation?**

18 A. No. The FOMC has not raised interest rates to date. The Fed's plan to
19 buy \$600 billion of U.S. government bonds over an eight month period,
20 known as quantitative easing stage two or QE2,²⁰ was completed during

¹⁹ <http://www.bls.gov/news.release/cpi.nr0.htm>

²⁰ Hilsenrath, Jon, "Fed Fires \$600 Billion Stimulus Shot" The Wall Street Journal, November 4, 2010

1 the summer of 2011. The attempt to drive down long-term interest rates
2 and encourage more borrowing and growth by increasing the money
3 supply has yet to stimulate the economy and fears of a recession persist.

4
5 At its October 24, 2012 meeting, the FOMC announced that it will continue
6 purchasing additional agency mortgage-backed securities at a pace of \$40
7 billion per month and continue, through the end of the year, its program to
8 extend the average maturity of its holdings of Treasury securities. The
9 FOMC also stated that it is maintaining its existing policy of reinvesting
10 principal payments from its holdings of agency debt and agency
11 mortgage-backed securities in agency mortgage-backed securities.
12 According to the FOMC, these actions, which together will increase the
13 Committee's holdings of longer-term securities by about \$85 billion each
14 month through the end of the year, should put downward pressure on
15 longer-term interest rates, support mortgage markets, and help to make
16 broader financial conditions more accommodative. The FOMC further
17 stated that it had decided to keep the target range for the federal funds
18 rate at 0 to 0.25 percent. The FOMC currently anticipates that
19 exceptionally low levels for the federal funds rate are likely to be
20 warranted at least through mid-2015.

21
22 ...
23

1 **Q. Putting this all into perspective, how have the Fed's actions since**
2 **2000 affected the yields on Treasury Instruments and benchmark**
3 **interest rates?**

4 A. As can be seen on Schedule WAR-8, current Treasury yields are
5 considerably lower than corresponding yields that existed during the year
6 2000 and U.S. Treasury instruments, are for the most part, still at
7 historically low levels. As can be seen on the first page of Attachment C,
8 the previously mentioned federal discount rate (the rate charged to the
9 Fed's member banks), has remained steady at 0.75 percent since
10 November of 2011.

11
12 As of November 20, 2011, leading interest rates that include the 3-month,
13 6-month and 1-year treasury yields have only increased 7 to 8 basis points
14 from their November 2011 levels. Longer term yields including the 5-year,
15 10-year and 30-year have all fallen from levels that existed a year ago.
16 The same is true for the 30-year Zero rate. The prime rate has remained
17 constant at 3.25 percent over the past year, as has the benchmark federal
18 funds rate discussed above. A previous trend, described by former
19 Chairman Greenspan as a "conundrum"²¹, in which long-term rates fell as
20 short-term rates increased, thus creating a somewhat inverted yield curve
21 that existed as late as June 2007, is completely reversed and a more
22 traditional yield curve (one where yields increase as maturity dates

²¹ Wolk, Martin, "Greenspan wrestling with rate 'conundrum'," MSNBC, June 8, 2005

lengthen) presently exists. The 30-year Treasury yield, used in my CAPM analysis, has decreased 6 basis points from 2.88 percent, in November 2011, to 2.82 percent as of November 20, 2012.

Q. What are the current yields on utility bonds?

A. Referring again to Attachment C, as of November 20, 2012, 25/30-year A-rated utility bonds were yielding 3.78 percent (28 basis points lower than a year ago) and 25/30-year Baa/BBB-rated utility bonds were yielding 4.13 percent (down 61 basis points from a year earlier).

Q. What is the current outlook for the economy?

A. The current outlook on the economy includes fears that a slide into recession could occur if there is no resolution of the so called fiscal cliff situation (which involves the scheduled expiration of Bush Administration-era tax cuts and scheduled federal spending cuts) between the Executive Branch and Congress. Value line's analysts offered this perspective on the economy in the November 30, 2011 edition of Value Line's Selection and Opinion publication:

"We are starting to see Hurricane Sandy's impact on the final-quarter economy. Of note, recent weeks have seen reports showing declines in retail spending, factory usage, and industrial production, with output in this last category estimated to have been reduced by nearly a percentage point by the storm. At the same time, jobless claims soared during the first part of November, due principally to disruptions from the hurricane."

Value Line's analysts went on to say:

1 **"Other disappointments could be on the way.** For example,
2 reports for November may well show the storm's effect on payroll
3 growth, the jobless rate, car sales, manufacturing, and non-
4 manufacturing. We feel any step back will be brief — but still
5 painful. Then, there is the fiscal cliff of mandated tax hikes and
6 spending cuts that is set to kick in on January 2nd, unless
7 Congress and the White House can author a deal. The fiscal cliff
8 already is hurting business and consumer confidence and may,
9 along with the toll from the hurricane, hold gross domestic
10 product growth to less than 1.5% in the fast-ending quarter."
11

12 Value Line's analysts also stated:

13 **"Meanwhile, volatility is stepping up a notch on Wall Street,**
14 which is understandable given the uncertain backdrop. Still, the
15 fundamentals of a growing economy, low inflation, and a
16 supportive Federal Reserve favor the bulls over the intermediate
17 term. But first, investors may have to navigate through some
18 choppy seas."
19

20 **Q. How are electric utilities such as TEP faring in the current economic**
21 **environment of low interest rates?**

22 **A. In the November 2, 2012 quarterly update (Attachment A) on the Electric**
23 **Utility (West) Industry, Value Line analyst Paul E. Debbas, CFA had this to**
24 **say:**

25 **"The Effects of Interest Rates on Utilities**

26
27 Since 2008, interest rates have been low as a result of Federal
28 Reserve policy. This has had various effects on utilities (and
29 their stocks). Some of these effects are positive, some negative.
30 The most noticeable effect on utilities is reflected in their stock
31 prices. With interest rates on savings accounts, money market
32 funds, and other income vehicles minuscule, many investors
33 have chosen to turn to income stocks. Utilities are known for
34 paying healthy dividends. Indeed, at 4.1%, this industry's
35 average yield is well above the median yield of all dividend-
36 paying equities under our coverage. Low interest rates also
37 reduce utilities' borrowing costs—something that is important in
38 such a capital-intensive sector. Interest savings from refinancing
39 debt will eventually be passed on to customers once the utility
40 receives a rate order. However, for debt held at the parent level
41 or at a non-utility subsidiary, the company retains any interest
42 reductions. Low interest rates also have some negative aspects
43 for this industry. Allowed returns on equity have been trending
44 down due to declining interest rates. Also, low interest rates

1 increase a company's pension obligations because they are
2 discounted at a lower rate. This can be reflected in higher
3 pension expense. Finally, Hawaiian Electric Industries is unique
4 in this group due to its ownership of American Savings Bank.
5 Low interest rates are squeezing the interest-rate spreads for
6 thrifts."
7

8 Also Included in Value Line's November 2, 2012 issue is its ranking of
9 each state's regulatory climate, plus that of the District of Columbia and
10 the Federal Energy Regulatory Commission ("FERC"). Value Line ranks
11 states as above average, average and below average. Interestingly,
12 Arizona was ranked as average along with Delaware, District of Columbia,
13 Florida, Hawaii, Iowa, Kansas, Kentucky, Louisiana, Michigan, Minnesota,
14 Mississippi, Missouri, Montana, Nevada, New Hampshire, New Jersey,
15 New Mexico, North Carolina, North Dakota, Oklahoma, Pennsylvania,
16 South Dakota, Texas, Virginia, Washington, Wyoming.

17
18 **Q. How has Arizona fared in terms of the overall economy and home**
19 **foreclosures?**

20 **A.** Arizona was one of the states hit hardest during the Great Recession and
21 has lagged during the current recovery.²² During the period between 2006
22 and 2009, statewide construction spending fell by 40.00 percent.
23 According to information provided by Irvine, California-based RealtyTrac,
24 Arizona was ranked third in the nation behind California and Nevada in
25 terms of home foreclosures with the largest number of foreclosures

²² Beard, Betty, "Recession hit Arizona hardest" The Arizona Republic, March 6, 2011.

1 occurring in Maricopa, Pinal and Pima Counties. As of this writing
2 RealtyTrac is ranking Arizona as having the fifth highest foreclosure rate in
3 the country.²³

4
5 **Q. What is the current unemployment situation in Arizona during this**
6 **period of economic recovery?**

7 A. According to information published on November 30, 2012, and displayed
8 on the website of the Arizona Department of Administration's Office of
9 Employment and Population Statistics,²⁴ the seasonally adjusted
10 unemployment rate for Arizona dropped two tenths of a percentage point
11 from 8.2% in September 2012, to 8.1% in October 2012. At the time that
12 this information was compiled, Arizona's rate of unemployment was higher
13 than the U.S. unemployment rate of 7.9%.

14
15 More recent information on the national rate of unemployment, released
16 by the U.S. Department of Labor on December 7, 2012, has pegged U.S.
17 unemployment at 7.70 percent.

18 According to the November 30, 2012 Arizona Department of
19 Administration's Office of Employment and Population Statistics report, the

²³ Associated Press: Arizona foreclosures keep on dropping," Arizona Capital Times, November 15, 2012.

²⁴ Arizona Department of Administration's Office of Employment and Population Statistics
<http://www.workforce.az.gov/> .

1 October 2012 rates of unemployment for the counties that are served by
2 TEP were as follows:

3 **Selected County Unemployment Rates - October 2012**

4	Cochise	7.8%
5		
6	Pima	7.1%
7		
8		

9 **Q. After weighing the economic information that you've just discussed,**
10 **do you believe that the 10.00 percent cost of equity capital that you**
11 **have estimated is reasonable for the Company?**

12 **A.** I believe that my recommended 10.00 percent cost of equity capital, which
13 is 587 basis points higher than the current 4.13 percent yield on a
14 Baa/BBB-rated utility bond, will provide TEP with a reasonable rate of
15 return on invested capital when data on interest rates (that are low by
16 historical standards), the current state of the economy, current rates of
17 unemployment (both nationally, in Arizona, and in the counties served by
18 TEP), and the Fed's decision to keep interest rates at their current levels
19 over the next three years are all taken into consideration. As I noted
20 earlier, the Hope decision determined that a utility is entitled to earn a rate
21 of return that is commensurate with the returns it would make on other
22 investments with comparable risk. I believe that my cost of equity
23 analysis, which is 40 basis points more than the high end of the range of
24 results I obtained from both the DCF and CAPM models, has produced
25 such a return.

26

CAPITAL STRUCTURE AND COST OF DEBT

Q. Please describe the Company-proposed capital structure.

A. The Company is proposing an adjusted end of test year capital structure comprised of 54.00 percent long-term debt and 46.00 percent common equity.

Q. How does the Company-proposed capital structure compare with the capital structures of the electric companies that comprise your sample?

A. The Company-proposed capital structure containing 46.00 percent common equity is somewhat lower in equity than the capital structures of the electric companies in my sample, which had an average of 49.00 percent common equity, and would be perceived by investors as having somewhat lower risk overall. TEP's proposed 54.00 percent level of long-term debt is higher than the average of 50.90 percent in my sample and would be perceived as having a higher level of financial risk.

Q. What capital structure are you recommending for TEP?

A. I am recommending that the Commission Company's actual end of test year capital structure comprised of 43.50 percent common equity, 55.97 percent long-term debt and 0.53 percent short-term debt.

1 **Q. Why are you recommending TEP's actual end of test year capital**
2 **structure?**

3 A. The actual end of test year capital structure is closer to the level of
4 financing associated with RUCO's recommended level of utility plant in
5 service which does not include all of the Company-proposed level of post-
6 test year plant.

7
8 **Q. Does your recommended cost of equity take into consideration the**
9 **higher level of financial risk that TEP faces given the higher amount**
10 **of debt in your recommended capital structure compared to the level**
11 **in the capital structures of your sample electric companies?**

12 A. Yes. My recommended 10.00 percent cost of common equity is 40 basis
13 points higher than the 9.60 percent cost of equity derived from my sample
14 of electric companies which, on average, had more balanced capital
15 structures.

16
17 **Q. Would you find a 10.00 percent cost of common equity to be**
18 **appropriate if the Commission were to adopt the Company-proposed**
19 **adjusted end of test year capital structure with a higher percentage**
20 **of equity?**

21 A. No. As discussed earlier in my direct testimony, my cost of capital
22 analysis derived a cost of common equity of 9.60 percent from my sample
23 of electric utilities, which had an average capital structure comprised of

1 46.00 percent common equity. This is the same percentage of common
2 equity in the Company-proposed adjusted end of test year capital
3 structure. If the Commission were to adopt TEP's proposed capital
4 structure, the 9.60 percent cost of common equity derived from my sample
5 should be the authorized cost of common equity.

6
7 **Q. What cost of long-term debt are you recommending for TEP?**

8 A. I am recommending that the Commission adopt TEP's actual end of test
9 year cost of long-term debt of 5.22 percent and the Company's cost of
10 short-term debt of 1.42 percent.

11
12 **WEIGHTED COST OF CAPITAL AND FAIR VALUE RATE OF RETURN**

13 **Q. What original cost weighted average cost of capital are you**
14 **recommending for TEP?**

15 A. Based on my recommended capital structure, comprised of 43.50 percent
16 common equity, 55.97 percent long-term debt and 0.53 percent short-term
17 debt, I am recommending an original cost weighted average cost of capital
18 of 7.28 percent (Schedule WAR-1, Page 1). This is the weighted average
19 cost of my recommended cost of 10.00 percent common equity, my
20 recommended cost of long-term debt of 5.22 percent and the my
21 recommended cost of short-term debt of 1.42 percent.

1 **Q. What fair value rate of return are you recommending for TEP?**

2 **A.** I am recommending a FVROR of 5.11 percent (Schedule WAR-1, Page 1)
3 which is 217 basis points lower than my OCROR of 7.28 percent. My
4 recommended FVROR satisfies the fair value requirement of the Arizona
5 Constitution which the Commission must follow when setting rates for
6 investor owned utilities such as TEP.

7
8 **Q. Why are you recommending a FVROR that is different from your**
9 **OCROR?**

10 **A.** Because TEP elected not to use the Company's original cost rate base
11 ("OCRB") as its fair value rate base ("FVRB") in this case. Instead, TEP
12 performed a reconstruction cost new less depreciation ("RCND") study to
13 restate the value, or reproduction cost, of the Company's OCRB. As is
14 the normal ratemaking practice in Arizona, the Company averaged the
15 values of its OCRB and its RCND rate base to arrive at a FVRB that is
16 higher than the OCRB. This is because the value of the FVRB reflects the
17 impact of inflation and other factors which tend to contribute to an upward
18 growth in value over time. Since the difference in the value of the OCRB
19 and the FVRB represents inflation, as opposed to additional investor
20 supplied capital, an OCROR which includes an inflation component cannot
21 be applied to the FVRB. To do so would result in a double counting of
22 inflation. For this reason it is necessary to remove the inflation component
23 that is included in the OCROR.

1 **Q. Does your recommended FVROR satisfy the requirements for**
2 **determining a FVROR that resulted from the Commission's Chaparral**
3 **City Water Company remand decision, which established the need to**
4 **remove the inflation component from an OCROR?**

5 A. Yes. On July 28, 2008, the Commission issued Decision No. 70441, in
6 which stated the following:

7 Our previous method was a shorthand method of ensuring that
8 inflation would only influence one piece of the ratemaking
9 formula - the rate of return. However, the Court of Appeals has
10 made it clear that, under our constitution, the "inflation
11 component" belongs in the FVRB. Accordingly, in order to
12 avoid over-counting the effect of inflation, it is necessary for us
13 to ensure that the rate of return does not also carry an inflation
14 component. [Decision No. 70441, p. 33]
15

16 **Q. How did you remove the inflation component from your OCROR?**

17 A. I reduced my recommended costs of common equity and long-term debt
18 by an inflation factor of 2.19 percent (Schedule WAR-1, Page 4). Because
19 short-term debt is generally paid off in a year, I did not apply the inflation
20 factor to my recommended cost of short-term debt. As a result of this
21 decision, the effective difference between my OCROR and FVROR is 2.17
22 percent which produced my recommended FVROR of 5.11 percent. The
23 method that I have used in this case produces a FVROR that is
24 comparable to the FVROR calculated for UNS Electric, Inc. in a prior rate
25 case proceeding. In that case the Commission adopted a method that
26 reduced the OCROR by an inflation factor that was recommended by

1 RUCO.²⁵ The Commission had previously used the same method in a
2 rate case proceeding for UNS Electric, Inc.'s sister utility, UNS Gas, Inc.

3

4 **Q. How did you calculate your inflation factor of 2.18 percent?**

5 A. By using the same RUCO methodology that produced an inflation factor
6 similar to what the Commission relied on in the prior UNS Electric, Inc.
7 case cited above. As can be seen on Page 4 of Schedule WAR-1, my
8 recommended 2.18 percent inflation factor represents the difference
9 between Treasury Inflation-Protected Securities ("TIPS") and comparable
10 securities issued by the U.S. Treasury with similar liquidity and duration
11 over a nine year period.

12

13 **Q. How does your FVROR compare to the FVROR being recommended**
14 **by TEP?**

15 A. My recommended FVROR of 5.11 percent is 57 basis points lower than
16 the 5.68 percent FVROR being proposed by TEP.

17

18 **Q. What inflation factor does TEP propose?**

19 A. TEP's cost of capital witness, Mr. Reed, is proposing an inflation
20 adjustment of 1.56 percent, which is approximately a 50.00 percent

²⁵ Decision No. 71914, dated September 30, 2010

1 reduction to the 2.10 percent inflation factor that he calculated as
2 requested by TEP.

3

4 **COMMENTS ON THE COMPANY-PROPOSED COST OF EQUITY CAPITAL**

5 **Q. Have you reviewed TEP's testimony on the Company-proposed cost**
6 **of equity capital?**

7 A. Yes, I have reviewed the testimony prepared by Mr. John J. Reed.

8

9 **Q. Please compare the Company-proposed cost of equity with your**
10 **recommended cost of equity.**

11 A. The Company is recommending a cost of equity capital of 10.75 percent
12 which is 75 basis points higher than my recommended 10.00 percent cost
13 of equity.

14

15 **Q. Have you studied the specific methods that Mr. Reed used to derive**
16 **the Company-proposed cost of equity capital?**

17 A. Yes.

18

19 **Q. What methods did Mr. Reed use to arrive at his cost of common**
20 **equity for TEP?**

21 A. Mr. Reed used the constant growth DCF model similar to the one that I
22 used and a multi-stage DCF. He also employed the CAPM and risk
23 premium methods to estimate TEP's cost of common equity. I did not

1 employ the risk premium methodology because this Commission has
2 traditionally placed more weight on the results of the DCF and CAPM.

3

4 **Q. Can you provide a comparison of the results derived from Mr. Reed's**
5 **models and yours?**

6 A. Yes. The following portion of my testimony will compare and contrast the
7 results of our constant growth DCF and CAPM analyses.

8

9 **DCF Comparison**

10 **Q. Please compare the results of Mr. Reed's DCF analyses and the**
11 **results of your DCF analysis.**

12 A. Mr. Reed presented the results of two DCF analyses that relied on the
13 same of regulated electric utilities that I relied on. His constant growth
14 DCF analysis produced estimates ranging from 9.66 percent to 12.06
15 percent. His multi-stage DCF analysis produced estimates ranging from
16 9.65 percent to 12.15 percent. My constant growth DCF analysis, which
17 relied on the same sample of electric utilities included in Mr. Reed's
18 sample, produced a final estimate of 9.60 percent.

19

20 **Q. What was the difference between Mr. Reed's dividend yield results**
21 **for electric utilities and your dividend yield results?**

22 A. Mr. Reed's constant growth DCF analysis of regulated electric utilities
23 produced an average dividend yield of 4.19 percent as opposed to my

1 average dividend yield of 4.13 percent. I attribute the 6 basis point
2 difference to slightly higher closing stock prices that I recorded during my
3 more recent 8-week observation period since there is not that much
4 difference in the average annualized dividends paid by our respective
5 sample companies.

6
7 **Q. Please compare your respective DCF growth estimates (g) for**
8 **electric utilities.**

9 A. Mr. Reed's constant growth DCF analysis produced an average growth
10 estimate of 6.49 percent compared to my 5.47 percent estimate.

11
12 **Q. Were there any differences in the way that you conducted your**
13 **constant growth DCF analysis and the way that Mr. Reed conducted**
14 **his?**

15 A. Yes. Mr. Reed also relied on projections from First Call in addition to my
16 reliance on Value Line and Zacks. The First Call growth projections of
17 6.88 percent were 141 basis points higher than my 5.47 percent average
18 growth estimate. However, I will point out that Mr. Reed's DCF analysis
19 was conducted prior to July of 2012 and analysts' growth estimates
20 appear to have fallen since that time. Mr. Reed's 6.27 percent EPS
21 growth estimate obtained from Zacks is 56 basis points higher than the
22 more recent 5.75 percent that I obtained from Zacks.

CAPM Comparison

Q. Please compare the results of Mr. Reed's CAPM analysis and the results of your CAPM analysis.

A. Mr. Reed's CAPM analysis produced expected return estimates ranging from 10.33 percent to 10.85 percent for our sample of electric utilities. His estimates are 451 basis points to 503 basis points higher than my 5.82 percent CAPM estimate that uses a geometric mean and are 335 basis points to 387 basis points higher than my 6.98 percent CAPM estimate that uses an arithmetic mean. Mr. Reed's range of CAPM estimates exceeds the recent yield of 4.13 percent on a Baa/BBB-rated utility bond yield by 620 to 672 basis points.

Q. What are the main reasons for Mr. Reed's higher CAPM results?

A. There are two reasons. First, Mr. Reed's use of forecasted yields on the 30-year Treasury Bond which is used as a proxy for the risk free rate of return and second, the market risk premiums which utilized Mr. Reed's own method for calculating the return on the market as opposed to relying on the more established method of relying on historical market data published in Morningstar.

...

1 **Q. Please describe the first difference in the way that you conducted**
2 **your CAPM analysis and the way that Mr. Reed conducted his?**

3 A. The first difference involves Mr. Reed's use of a then current 3.24 percent
4 yield on a 30-year Treasury bond which has since fallen to 2.82 percent
5 (Attachment C) and his reliance on higher forecasted estimates of the
6 yield on the same 30-year Treasury instrument as opposed to the more
7 recent 8-week average yields of the 30-year Treasury bond that I relied on
8 for the risk-free rate of return.

9
10 **Q. Do you believe that analyst's forecasted yields on U.S. Treasury**
11 **instruments are appropriate?**

12 A. No. I believe that the most current yield is the best indicator of future
13 yields.

14
15 **Q. What is the second difference between your respective CAPM**
16 **analyses?**

17 A. The second difference involves the market risk premium. Mr. Reed's
18 market risk premiums were derived by subtracting Mr. Reed's
19 aforementioned 30-year Treasury yields from a 12.97 percent estimated
20 required market return on the S&P 500 obtained through a DCF model.
21 His S&P 500 data consisted of forecasted dividend and growth estimates
22 which produced higher market risk premiums ranging from 7.87 percent to
23 9.73 percent as opposed to my market risk premiums of 4.10 percent and

1 5.70 percent. Mr. Reed's higher market risk premiums are the result of his
2 reliance on forecasted data as opposed to the Morningstar SBBI Yearbook
3 actual historical data, which encompassed a much broader period of the
4 U.S. economy between 1926 and 2011, that I relied on.

5
6 **Q. Did Mr. Reed use the same Value Line betas that you used in your**
7 **CAPM analysis?**

8 A. Yes. However, Mr. Reed's utility sample had an average Value Line beta
9 of 0.731 as opposed to my average Value Line beta of 0.72 (which
10 demonstrates that the Value Line betas for our sample companies are
11 lower than what they were at the time that Mr. Reed prepared his
12 testimony on TEP). Mr. Reed also relied on betas published by
13 Bloomberg which averaged 0.729.

14
15 **Q. What is the beta of UNS Energy Corporation, the parent of TEP?**

16 A. UNS Energy Corporation has a Value Line beta of 0.70 which is lower
17 than Mr. Reed's average Value Line utility sample betas of 0.731 and his
18 Bloomberg average sample beta of 0.729. TEP's Parent's beta is also
19 lower than my average Value Line beta of 0.72. This indicates that TEP's
20 Parent is not as risky as the average of our respective sample electric
21 utilities.

1 **Q. How did Mr. Reed arrive at his final 10.75 percent cost of equity**
2 **capital for TEP?**

3 **A. Mr. Reed's proposed cost of equity estimate of 10.75 percent was chosen**
4 **by TEP based on the range of results obtained from his cost of capital**
5 **analysis.**

6
7 **Q. Does your silence on any of the issues, matters or findings**
8 **addressed in the testimony of Mr. Reed or any other witness for TEP**
9 **constitute your acceptance of their positions on such issues,**
10 **matters or findings?**

11 **A. No, it does not.**
12

13 **Q. Does this conclude your testimony on TEP?**

14 **A. Yes, it does.**

Qualifications of William A. Rigsby, CRRA

EDUCATION:

University of Phoenix
Master of Business Administration, Emphasis in Accounting, 1993

Arizona State University
College of Business
Bachelor of Science, Finance, 1990

Mesa Community College
Associate of Applied Science, Banking and Finance, 1986

Society of Utility and Regulatory Financial Analysts
38th Annual Financial Forum and CRRA Examination
Georgetown University Conference Center, Washington D.C.
Awarded the Certified Rate of Return Analyst designation
after successfully completing SURFA's CRRA examination.

Michigan State University
Institute of Public Utilities
N.A.R.U.C. Annual Regulatory Studies Program, 1997 & 1999

Florida State University
Center for Professional Development & Public Service
N.A.R.U.C. Annual Western Utility Rate School, 1996

EXPERIENCE:

Chief of Accounting and Rates
Residential Utility Consumer Office
October 2011 – Present

Public Utilities Analyst V
Residential Utility Consumer Office
April 2001 – Present

Senior Rate Analyst
Accounting & Rates - Financial Analysis Unit
Arizona Corporation Commission, Utilities Division
July 1999 – April 2001

Senior Rate Analyst
Residential Utility Consumer Office
December 1997 – July 1999

Utilities Auditor II and III
Accounting & Rates – Revenue Requirements Analysis Unit
Arizona Corporation Commission, Utilities Division
October 1994 – November 1997

Tax Examiner Technician I / Revenue Auditor II
Arizona Department of Revenue
Transaction Privilege / Corporate Income Tax Audit Units
July 1991 – October 1994

RESUME OF RATE CASE AND REGULATORY PARTICIPATION

<u>Utility Company</u>	<u>Docket No.</u>	<u>Type of Proceeding</u>
ICR Water Users Association	U-2824-94-389	Original CC&N
Rincon Water Company	U-1723-95-122	Rate Increase
Ash Fork Development Association, Inc.	E-1004-95-124	Rate Increase
Parker Lakeview Estates Homeowners Association, Inc.	U-1853-95-328	Rate Increase
Mirabell Water Company, Inc.	U-2368-95-449	Rate Increase
Bonita Creek Land and Homeowner's Association	U-2195-95-494	Rate Increase
Pineview Land & Water Company	U-1676-96-161	Rate Increase
Pineview Land & Water Company	U-1676-96-352	Financing
Montezuma Estates Property Owners Association	U-2064-96-465	Rate Increase
Houghland Water Company	U-2338-96-603 et al	Rate Increase
Sunrise Vistas Utilities Company – Water Division	U-2625-97-074	Rate Increase
Sunrise Vistas Utilities Company – Sewer Division	U-2625-97-075	Rate Increase
Holiday Enterprises, Inc. dba Holiday Water Company	U-1896-97-302	Rate Increase
Gardener Water Company	U-2373-97-499	Rate Increase
Cienega Water Company	W-2034-97-473	Rate Increase
Rincon Water Company	W-1723-97-414	Financing/Auth. To Issue Stock
Vail Water Company	W-01651A-97-0539 et al	Rate Increase
Bermuda Water Company, Inc.	W-01812A-98-0390	Rate Increase
Bella Vista Water Company	W-02465A-98-0458	Rate Increase
Pima Utility Company	SW-02199A-98-0578	Rate Increase

RESUME OF RATE CASE AND REGULATORY PARTICIPATION (Cont.)

<u>Utility Company</u>	<u>Docket No.</u>	<u>Type of Proceeding</u>
Pineview Water Company	W-01676A-99-0261	WIFA Financing
I.M. Water Company, Inc.	W-02191A-99-0415	Financing
Marana Water Service, Inc.	W-01493A-99-0398	WIFA Financing
Tonto Hills Utility Company	W-02483A-99-0558	WIFA Financing
New Life Trust, Inc. dba Dateland Utilities	W-03537A-99-0530	Financing
GTE California, Inc.	T-01954B-99-0511	Sale of Assets
Citizens Utilities Rural Company, Inc.	T-01846B-99-0511	Sale of Assets
MCO Properties, Inc.	W-02113A-00-0233	Reorganization
American States Water Company	W-02113A-00-0233	Reorganization
Arizona-American Water Company	W-01303A-00-0327	Financing
Arizona Electric Power Cooperative	E-01773A-00-0227	Financing
360networks (USA) Inc.	T-03777A-00-0575	Financing
Beardsley Water Company, Inc.	W-02074A-00-0482	WIFA Financing
Mirabell Water Company	W-02368A-00-0461	WIFA Financing
Rio Verde Utilities, Inc.	WS-02156A-00-0321 et al	Rate Increase/ Financing
Arizona Water Company	W-01445A-00-0749	Financing
Loma Linda Estates, Inc.	W-02211A-00-0975	Rate Increase
Arizona Water Company	W-01445A-00-0962	Rate Increase
Mountain Pass Utility Company	SW-03841A-01-0166	Financing
Picacho Sewer Company	SW-03709A-01-0165	Financing
Picacho Water Company	W-03528A-01-0169	Financing
Ridgeview Utility Company	W-03861A-01-0167	Financing
Green Valley Water Company	W-02025A-01-0559	Rate Increase
Bella Vista Water Company	W-02465A-01-0776	Rate Increase
Arizona Water Company	W-01445A-02-0619	Rate Increase

RESUME OF RATE CASE AND REGULATORY PARTICIPATION (Cont.)

<u>Utility Company</u>	<u>Docket No.</u>	<u>Type of Proceeding</u>
Arizona-American Water Company	W-01303A-02-0867 et al.	Rate Increase
Arizona Public Service Company	E-01345A-03-0437	Rate Increase
Rio Rico Utilities, Inc.	WS-02676A-03-0434	Rate Increase
Qwest Corporation	T-01051B-03-0454	Renewed Price Cap
Chaparral City Water Company	W-02113A-04-0616	Rate Increase
Arizona Water Company	W-01445A-04-0650	Rate Increase
Tucson Electric Power	E-01933A-04-0408	Rate Review
Southwest Gas Corporation	G-01551A-04-0876	Rate Increase
Arizona-American Water Company	W-01303A-05-0405	Rate Increase
Black Mountain Sewer Corporation	SW-02361A-05-0657	Rate Increase
Far West Water & Sewer Company	WS-03478A-05-0801	Rate Increase
Gold Canyon Sewer Company	SW-02519A-06-0015	Rate Increase
Arizona Public Service Company	E-01345A-05-0816	Rate Increase
Arizona-American Water Company	W-01303A-05-0718	Transaction Approval
Arizona-American Water Company	W-01303A-05-0405	ACRM Filing
Arizona-American Water Company	W-01303A-06-0014	Rate Increase
UNS Gas, Inc.	G-04204A-06-0463	Rate Increase
Arizona-American Water Company	WS-01303A-06-0491	Rate Increase
UNS Electric, Inc.	E-04204A-06-0783	Rate Increase
Arizona-American Water Company	W-01303A-07-0209	Rate Increase
Tucson Electric Power	E-01933A-07-0402	Rate Increase
Southwest Gas Corporation	G-01551A-07-0504	Rate Increase
Chaparral City Water Company	W-02113A-07-0551	Rate Increase
Arizona Public Service Company	E-01345A-08-0172	Rate Increase
Johnson Utilities, LLC	WS-02987A-08-0180	Rate Increase
Arizona-American Water Company	W-01303A-08-0227 et al.	Rate Increase

RESUME OF RATE CASE AND REGULATORY PARTICIPATION (Cont.)

<u>Utility Company</u>	<u>Docket No.</u>	<u>Type of Proceeding</u>
UNS Gas, Inc.	G-04204A-08-0571	Rate Increase
Arizona Water Company	W-01445A-08-0440	Rate Increase
Far West Water & Sewer Company	WS-03478A-08-0608	Interim Rate Increase
Black Mountain Sewer Corporation	SW-02361A-08-0609	Rate Increase
Global Utilities	SW-02445A-09-0077 et al.	Rate Increase
Litchfield Park Service Company	SW-01428A-09-0104 et al.	Rate Increase
UNS Electric, Inc.	E-04204A-09-0206	Rate Increase
Rio Rico Utilities, Inc.	WS-02676A-09-0257	Rate Increase
Arizona-American Water Company	W-01303A-09-0343	Rate Increase
Bella Vista Water Company	W-02465A-09-0411 et al.	Rate Increase
Chaparral City Water Company	W-02113A-10-0309	Reorganization
Qwest Communications International	T-04190A-10-0194 et al.	Merger
CenturyLink, Inc.	T-04190A-10-0194 et al.	Merger
Southwest Gas Corporation	G-01551A-10-0458	Rate Increase
Arizona-American Water Company	W-01303A-10-0448	Rate Increase
Arizona-American Water Company	W-01303A-11-0101	Reorganization
Arizona-American Water Company	W-01303A-09-0343	Deconsolidation
Goodman Water Company	W-02500A-10-0382	Rate Increase
Arizona Water Company	W-01445A-10-0517	Rate Increase
Bermuda Water Company, Inc.	W-01812A-10-0521	Rate Increase
UNS Gas, Inc.	G-04204A-11-0158	Rate Increase
Arizona Public Service Company	E-01345A-11-0224	Rate Increase
Arizona Water Company	W-01445A-11-0310	Rate Increase
Pima Utility Company	W-02199A-11-0329 et al.	Rate Increase

ATTACHMENT A

All of the major electric utilities located in the central region of the United States are reviewed in this Issue; eastern electrics, in Issue 1; and the remaining utilities, in Issue 11.

A court overturned a rule from the Environmental Protection Agency that was supposed to have taken effect in 2012. This doesn't mean that electric utilities are off the hook for environmental upgrades, however.

Regardless of any EPA rules, coal-fired generation has declined this year due to low gas prices.

Investors in dividend-paying stocks, such as utilities, are facing a tax increase next year, unless Congress acts.

Most equities in this Industry are expensively priced, compared to historical standards for utilities.

An Update On EPA Rules

In 2011, the U.S. Environmental Protection Agency issued a rule concerning cross-state air pollution. The new regulation was supposed to have taken effect in early 2012. The rule created much consternation from owners of coal-fired units due to the short time frame for compliance, and litigation ensued. The rule was put on hold by one court order, then struck down by another. This was welcome news for most electric utilities with coal-fired generation, some of which would have had to curtail the usage of coal-fired plants had this rule gone into effect as scheduled originally. EPA will have a chance to revise this rule.

However, utilities with coal-fired facilities are still facing stricter limits on mercury emissions, which will take effect in 2015. This will be costly for many companies, although some (such as FirstEnergy and *American Electric Power*) have found ways to lessen their expected expenditures. In fact, some utilities have closed or plan to close some coal-fired plants. The costs of compliance aren't the only reason for the closings. Low prices for wholesale power have made complying with the new rule uneconomical for some utilities.

A Shift From Coal To Gas

Electric utilities' plants are dispatched based on their

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variable production costs. Nuclear units are first in the merit order, usually followed by coal, then gas. However, with natural gas prices so low, some electric companies have shifted some of their production from coal to gas. According to the U.S. Energy Information Administration, in 2010 (the latest data available), coal was used to generate 45% of the nation's electricity, and natural gas' share was 24%. Based on information provided by various utilities, these figures will be quite different in 2012, although coal will still exceed gas.

This does not create a windfall for utilities. Most, if not all, of the lower fuel costs are passed on to customers. Even so, this is indirectly beneficial for utilities that are seeking base rate increases. It is easier for a utility to convince the regulators to raise its base electric rates if lower fuel costs will offset part of the rate hike.

The Dividend Tax Rate

In 2003, Congress (with the support of the Bush Administration) lowered the tax rate on dividend income to a maximum of 15%. The law was set to expire at the end of 2010, but was extended for two years. Unless Congress acts, the law will expire at the end of 2012, and dividend income will be taxed as ordinary income beginning in 2013. Many utilities, the Edison Electric Institute (a trade group for investor-owned electric utilities), and the American Gas Association are lobbying Congress to avoid this situation. Investors might well have to wait until after Election Day for this matter to be resolved.

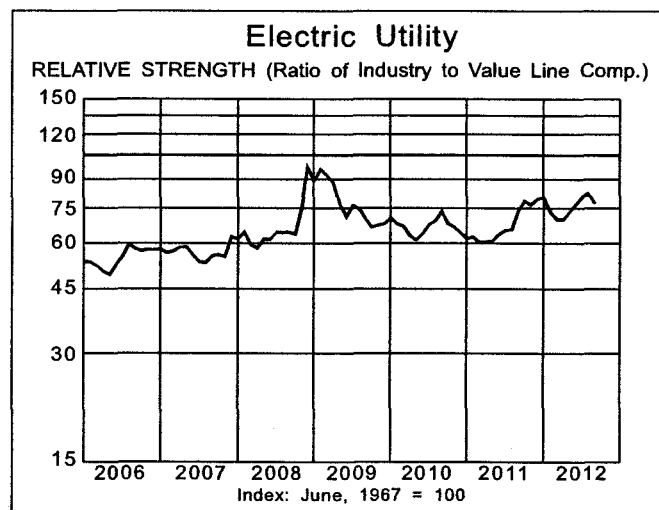
Conclusion

With interest rates so low, electric utility stocks have gotten much attention from investors due to their high dividend yields. The average yield of equities in this industry is above 4%.

Electric utility issues usually trade at a below-market price-earnings ratio, unless earnings are depressed. (*ITC Holdings* is an exception.) However, several utilities are now trading at a price-earnings ratio that is above the market's. This is an indication of how expensively priced many of these equities have become. Another indication of their high valuation is the fact that many of them are trading within their 2015-2017 Target Price Range.

Paul E. Debbas, CFA

Composite Statistics: Electric Utility Industry							
2008	2009	2010	2011	2012	2013		15-17
340.1	301.9	311.2	319.2	290	305	Revenues (\$bill)	350
27.2	26.9	29.3	30.3	27.0	29.0	Net Profit (\$bill)	36.0
33.3%	32.3%	34.1%	32.4%	33.5%	34.0%	Income Tax Rate	34.0%
7.8%	9.1%	8.8%	7.7%	7.0%	7.0%	AFUDC % to Net Profit	6.0%
53.4%	52.9%	52.6%	52.1%	51.0%	51.0%	Long-Term Debt Ratio	50.5%
45.6%	46.2%	46.6%	47.1%	48.5%	48.5%	Common Equity Ratio	49.0%
500.6	536.2	568.8	601.0	570	595	Total Capital (\$bill)	680
538.2	580.6	625.2	688.9	665	700	Net Plant (\$bill)	800
7.0%	6.5%	6.6%	6.5%	6.0%	6.0%	Return on Total Cap'l	6.5%
11.7%	10.7%	10.9%	10.5%	9.5%	9.5%	Return on Shr. Equity	10.5%
11.8%	10.8%	10.9%	10.6%	9.5%	10.0%	Return on Com Equity	10.5%
5.1%	4.3%	4.6%	4.1%	3.5%	3.5%	Retained to Com Eq	4.0%
57%	61%	59%	60%	67%	64%	All Div'ds to Net Prof	61%
15.0	12.5	12.8	13.8	Bold figures are Value Line estimates		Avg Ann'l P/E Ratio	13.5
.90	.83	.81	.87			Relative P/E Ratio	.90
6.0%	4.8%	4.6%	4.4%			Avg Ann'l Div'd Yield	4.3%



All of the major electric utilities located in the western region of the United States are reviewed in this Issue; eastern electrics, in Issue 1; and the remaining utilities, in Issue 5.

We discuss regulatory climates for utilities and present the regulatory climate for almost every state, the District of Columbia, and the Federal Energy Regulatory Commission.

We discuss the effects of low interest rates on utilities. The effects aren't entirely positive.

In general, electric utility issues are expensively priced.

Ranking The Regulators

Occasionally, *The Value Line Investment Survey* publishes a list showing the regulatory climate in almost every state, the District of Columbia, and the Federal Energy Regulatory Commission (FERC). This is important because every electric utility will, at some point, have a regulatory proceeding before the state commission. This is true even in states that have deregulated the power-generation function, because the transmission and distribution functions remain regulated. For each electric utility under our coverage, we show the state's regulatory climate.

Electric utilities have been filing general rate cases more frequently in recent years, so investors ought to take note of the regulatory climate in the state or states in which the company operates. The increased regulatory activity is typically prompted by major capital projects that need to be placed in the rate base; rising operating and maintenance expenses; or a utility's ongoing inability to earn its allowed return on equity.

Strictly speaking, the regulatory climates are not rankings of the state regulatory commissions. To be sure, the regulatory commission plays the biggest role, in our evaluation, but a state's ranking is also influenced by the executive, legislative, and judicial branches of the state government.

Seven states are not included in the list below, either because investor-owned electric companies have little presence there or because we do not cover any companies that have significant operations there. These states are Alaska, Maine, Nebraska, Rhode Island, Tennessee, Utah, and Vermont.

- **Above Average:** Alabama, California, Colorado, Georgia, Idaho, Indiana, Massachusetts, Ohio, South Carolina, Wisconsin, FERC.
- **Average:** Arizona, Delaware, District of Columbia, Florida, Hawaii, Iowa, Kansas, Kentucky, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Montana, Nevada, New Hampshire, New Jersey, New Mexico, North Carolina, North Dakota, Oklahoma, Pennsylvania, South Dakota, Texas, Virginia, Washington, Wyoming.
- **Below Average:** Arkansas, Connecticut, Illinois, Maryland, New York, Oregon, West Virginia.

Since the last time we ran this table, we have raised Georgia's regulatory climate from Average to Above Average and lowered South Dakota's regulatory climate from Above Average to Average. Regulation in Georgia has been reasonable for Georgia Power (a subsidiary of Southern Company), and regulatory law in the state is

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allowing the utility to recover construction work in progress for the nuclear units that are being built. On the other hand, we could not justify keeping South Dakota at Above Average, given the poor returns and regulatory struggles that *Xcel Energy* is having there.

The Effects Of Interest Rates On Utilities

Since 2008, interest rates have been low as a result of Federal Reserve policy. This has had various effects on utilities (and their stocks). Some of these effects are positive, some negative.

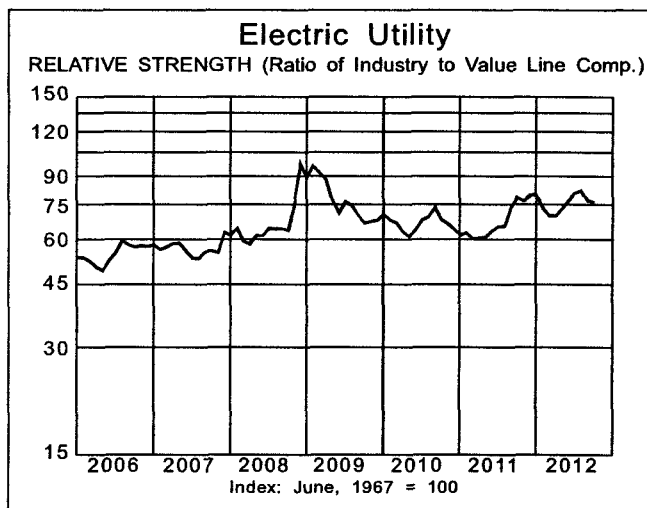
The most noticeable effect on utilities is reflected in their stock prices. With interest rates on savings accounts, money market funds, and other income vehicles minuscule, many investors have chosen to turn to income stocks. Utilities are known for paying healthy dividends. Indeed, at 4.1%, this industry's average yield is well above the median yield of all dividend-paying equities under our coverage. Low interest rates also reduce utilities' borrowing costs—something that is important in such a capital-intensive sector. Interest savings from refinancing debt will eventually be passed on to customers once the utility receives a rate order. However, for debt held at the parent level or at a nonutility subsidiary, the company retains any interest reductions.

Low interest rates also have some negative aspects for this industry. Allowed returns on equity have been trending down due to declining interest rates. Also, low interest rates increase a company's pension obligations because they are discounted at a lower rate. This can be reflected in higher pension expense. Finally, *Hawaiian Electric Industries* is unique in this group due to its ownership of American Savings Bank. Low interest rates are squeezing the interest-rate spreads for thrifts.

Conclusion

The prices of many electric utility issues have risen to atypically high valuations. Several utility stocks are trading at a premium to the market price-earnings ratio. The vast majority have share prices that are within their 2015-2017 Target Price Ranges. Thus, it has become hard to find attractive electric utility selections. In particular, we would avoid the shares of *PG&E* and *Edison International*.

Paul E. Debbas, CFA



All of the major electric utilities located in the eastern region of the United States are reviewed in this Issue; central electrics, in Issue 5; and the remaining utilities, in Issue 11.

We discuss the effects of Hurricane Sandy on electric utilities.

Two utilities are building nuclear plants, and some other companies are expanding their nuclear capacity through uprate programs.

Electric utility stocks, as a group, haven't moved much in 2012, but many issues still have high valuations.

Hurricane Sandy

Hurricane Sandy hit the Northeast in late October—coincidentally, on the same date on which the region experienced a freak snowstorm a year earlier. More than eight million customers lost power, some for about two weeks. New Jersey and New York were hit the hardest, but the surrounding states were affected, too. *Consolidated Edison* estimates that its two utilities incurred costs of \$425 million-\$550 million. *FirstEnergy* is still tallying the costs, but estimates that they will amount to more than \$500 million. *Exelon* estimated that the operating and maintenance costs due to the storm, which affected its utilities in Pennsylvania and Maryland, are \$100 million. Public Service Electric and Gas (a subsidiary of *Public Service Enterprise Group*) is still assessing the restoration costs of the worst storm in the utility's history. Some of these expenses will be reflected in companies' bottom lines in the fourth quarter; others will be deferred, for future recovery from customers. Although some companies (such as *Dominion Resources*) typically exclude costs caused by severe weather from their definition of "operating" earnings, we include them in our presentation.

In the autumn of 2011, Connecticut Light & Power (a subsidiary of *Northeast Utilities*) received a lot of criticism from customers and state politicians because its outage lasted longer than those of other electric utilities in the region. The company wound up writing off part of the costs it incurred as a result of the aforementioned snowstorm. This illustrates a risk that utilities can face following a major weather disturbance. At least this utility's performance in response to Hurricane Sandy was much better.

Nuclear Construction

According to the conventional wisdom of the early 1990s, no electric utility in the United States was ever going to build another nuclear plant. Following the accident at Unit 2 of the Three Mile Island station in 1979, the next decade saw huge cost overruns in construction. Several mothballed or canceled plants led to regulatory disallowances and write-offs for utilities. This made the prospect of new nuclear construction unappealing.

In 2005, a federal law was passed to facilitate the construction of nuclear units. This involves an approval process by the Nuclear Regulatory Commission, based on a choice of specified designs, before construction begins. This was meant to avoid the changing regulations that caused construction costs to soar in the 1980s.

With construction of coal-fired plants increasingly unpopular due to environmental and political concerns,

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several utilities have considered building nuclear plants. Two have actually begun construction: Georgia Power (a subsidiary of *Southern Company*) and South Carolina Electric & Gas (a subsidiary of *SCANA*). Each company is building two units that are scheduled for completion in the second half of this decade. So far, each project has had some cost overruns, but these haven't been drastic.

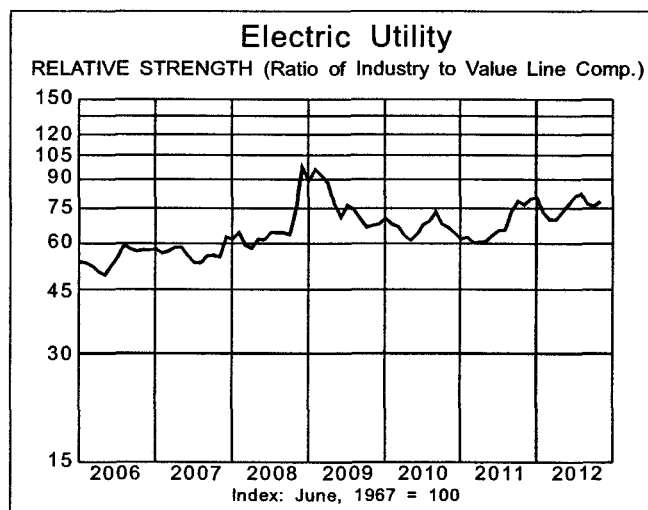
What does it take for a utility to build nuclear units, besides lots of money? The company must have an adequate site. Georgia Power and SCE&G are building their units at the sites of existing nuclear facilities. The utility also needs a regulatory mechanism that allows it to recover construction work in progress in customers' rates. This lessens the financial strain on the company and allows it to avoid the rate shock that would occur if tariffs were raised sharply upon completion of the plants.

Some companies are adding nuclear capacity without building plants. Instead, they are expanding capacity of existing units by upgrading equipment. This is known as a nuclear "uprate." Florida Power & Light, (a subsidiary of *NextEra Energy*) is adding 526 megawatts of capacity at a cost of \$2.95 billion-\$3.15 billion. By the end of 2012, *Exelon* will have added 250 mw at some of its nuclear units (all of which are nonregulated) at a cost of nearly \$1.2 billion. Low prices for wholesale power have induced the company to postpone uprates on two plants. Xcel Energy also plans to uprate one of its nuclear stations by 71 mw (pending NRC approval), but is deciding whether to expand the other one.

Conclusion

Following a pullback after Election Day, the Value Line Utility Average is down about 4% in 2012, falling far short of the broader market averages. We believe this is due to reversion to the mean; in 2011, utility issues were the outperformers. There has been a disparity in the performance of utility issues this year, with *Sempra Energy* stock having risen 20%, and *Exelon* shares having fallen more than 30%. Despite the relative underperformance, most stocks in this industry are still priced expensively. The majority of equities in the Electric Utility Industry are trading within their 3- to 5-year Target Price Ranges. Historically, this has been an indication that the group, as a whole, is overvalued.

Paul E. Debbas, CFA



AMERICAN ELEC. PWR. NYSE-AEP

RECENT PRICE **43.43**

P/E RATIO **13.8** (Trailing: 14.1; Median: 13.0)

RELATIVE P/E RATIO **0.91**

DIV'D YLD **4.5%**

VALUE LINE

TIMELINESS 3 Lowered 5/4/12
SAFETY 3 Lowered 10/4/02
TECHNICAL 3 Lowered 9/14/12
BETA .70 (1.00 = Market)

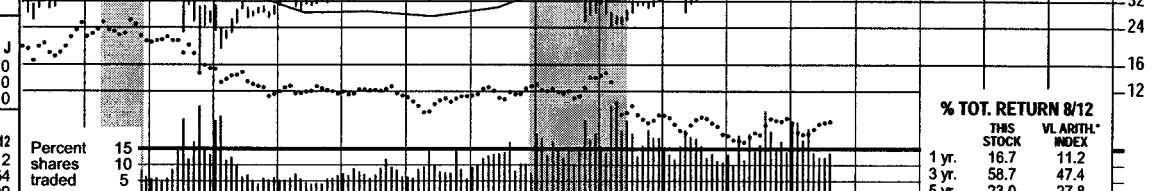
High: 51.2 48.8 31.5 35.5 40.8 43.1 51.2 49.1 36.5 37.9 41.7 44.0
 Low: 39.3 15.1 19.0 28.5 32.3 32.3 41.7 25.5 24.0 28.2 33.1 37.0

LEGENDS
 0.87 x Dividends p sh
 divided by Interest Rate
 Relative Price Strength
 Options: Yes
 Shaded areas indicate recessions

2015-17 PROJECTIONS
 Price 55 40
 Gain (+25%) (-10%)
 Ann'l Total Return 10% 3%

Insider Decisions
 to Buy 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 Options 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
 to Sell 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Institutional Decisions
 4Q2011 1Q2012 2Q2012
 to Buy 339 323 312
 to Sell 208 279 254
 Hld's(000) 299983 298208 270699



1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	© VALUE LINE PUB. LLC	15-17
31.07	32.43	33.08	35.63	42.53	190.10	42.96	36.82	35.51	30.76	31.82	33.41	35.56	28.22	30.01	31.27	30.65	32.30	Revenues per sh	36.50
6.31	6.47	6.03	6.36	5.11	7.65	6.99	5.76	5.89	5.96	6.67	6.80	6.84	6.32	6.29	6.83	6.90	7.10	"Cash Flow" per sh	8.25
3.14	3.28	2.81	2.69	1.04	3.27	2.86	2.53	2.61	2.64	2.86	2.86	2.99	2.97	2.60	3.13	3.10	3.10	Earnings per sh ^A	3.50
2.40	2.40	2.40	2.40	2.40	2.40	2.40	1.65	1.40	1.42	1.50	1.58	1.64	1.64	1.71	1.85	1.90	1.96	Div'd Decl'd per sh ^B	2.15
3.07	4.00	4.13	4.47	5.51	5.69	5.08	3.44	4.28	6.11	8.89	8.88	9.83	6.19	5.07	5.74	6.80	7.75	Cap'l Spending per sh	7.50
24.15	24.62	25.24	25.79	25.01	25.54	20.85	19.93	21.32	23.08	23.73	25.17	26.33	27.49	28.33	30.33	31.60	32.80	Book Value per sh ^C	36.75
188.24	189.99	191.82	194.10	322.02	322.24	338.84	395.02	395.86	393.72	396.67	400.43	406.07	478.05	480.81	483.42	486.00	489.00	Common Shs Outst'g ^D	500.00
13.2	13.4	17.0	14.3	34.3	13.9	12.7	10.7	12.4	13.7	12.9	16.3	13.1	10.0	13.4	11.9	Bold figures are Value Line estimates	Avg Ann'l P/E Ratio	13.5	
.83	.77	.88	.82	2.23	.71	.69	.61	.66	.73	.70	.87	.79	.67	.85	.75		Relative P/E Ratio	.90	
5.8%	5.5%	5.0%	6.2%	6.7%	5.3%	6.6%	6.1%	4.3%	3.9%	4.1%	3.4%	4.2%	5.5%	4.9%	5.0%		Avg Ann'l Div'd Yield	4.5%	

CAPITAL STRUCTURE as of 6/30/12
 Total Debt \$18510 mill. Due in 5 Yrs \$6372 mill.
 LT Debt \$15319 mill. LT Interest \$844 mill.
 Incl. \$2389 mill. securitized bonds.
 (LT interest earned: 3.4x)

Leases, Uncapitalized Annual rentals \$316 mill.
Pension Assets-12/11 \$4.30 bill.
Oblig. \$4.99 bill.

Pfd Stock None

Common Stock 484,902,556 shs.
as of 7/26/12

MARKET CAP: \$21 billion (Large Cap)

ELECTRIC OPERATING STATISTICS

	2009	2010	2011
% Change Retail Sales (KWH)	-6.4	+4.5	+1.2
Avg. Indust. Use (MWH)	NA	NA	NA
Avg. Indust. Revs. per KWH (¢)	4.83	4.95	4.95
Capacity at Peak (Mw)	NA	NA	NA
Peak Load (Mw)	NA	NA	NA
Annual Load Factor (%)	NA	NA	NA
% Change Customers (yr-end)	NA	NA	NA

Fixed Charge Cov. (%) 265 257 286

ANNUAL RATES	Past 10 Yrs.	Past 5 Yrs.	Est'd '09-'11
of change (per sh)			
Revenues	-10.5%	-2.0%	3.5%
"Cash Flow"	--	1.0%	4.0%
Earnings	2.0%	1.5%	3.0%
Dividends	-3.0%	4.0%	3.5%
Book Value	1.0%	5.0%	4.0%

Cal-endar	QUARTERLY REVENUES (\$ mil.)	Full Year
	Mar.31 Jun.30 Sep.30 Dec.31	
2009	3458 3202 3547 3282	13489
2010	3569 3360 4064 3434	14427
2011	3730 3609 4333 3444	15116
2012	3625 3551 4300 3424	14900
2013	3850 3750 4450 3750	15800

Cal-endar	EARNINGS PER SHARE ^A	Full Year
	Mar.31 Jun.30 Sep.30 Dec.31	
2009	.89 .68 .93 .49	2.97
2010	.72 .35 1.16 .37	2.60
2011	.83 .73 1.17 .41	3.13
2012	.80 .75 1.10 .45	3.10
2013	.85 .75 1.05 .45	3.10

Cal-endar	QUARTERLY DIVIDENDS PAID ^B	Full Year
	Mar.31 Jun.30 Sep.30 Dec.31	
2008	.41 .41 .41 .41	1.64
2009	.41 .41 .41 .41	1.64
2010	.41 .42 .42 .46	1.71
2011	.46 .46 .46 .47	1.85
2012	.47 .47 .47 .47	

BUSINESS: American Electric Power Company, Inc. (AEP), through 10 operating utilities, serves about 5.3 million customers in Arkansas, Kentucky, Indiana, Louisiana, Michigan, Ohio, Oklahoma, Tennessee, Texas, Virginia, and West Virginia. Electric revenue breakdown: residential, 37%; commercial, 23%; industrial, 21%; wholesale, 16%; other, 3%. Sold 50% stake in Yorkshire

American Electric Power will be making a transition to competitive markets in Ohio in the next few years. The Public Utilities Commission of Ohio (PUCO) issued a new plan in the third quarter. The PUCO overturned the previous transition plan earlier this year after some customers complained about much higher bills. AEP's base generation rates will be frozen (but there will be a fuel adjustment clause), and the utility will be able to collect a nonbypassable retail stability rider and a capacity charge to help compensate for the effects of customer switching to other suppliers. AEP will make another filing to separate its generating units in Ohio into a nonutility affiliate, except for two units that will be transferred to two regulated companies. Management was disappointed with certain aspects of the transition plan that the PUCO ordered, and has asked the regulators for a rehearing. Because the new plan will make it easier for other providers to compete in AEP's service territory, we have lowered our 2013 earnings estimate by \$0.15 a share, to \$3.10, which would be flat with our estimated 2012 tally.

Holdings (British utility) '01; sold SEEBARD (British utility) '02; sold Houston Pipeline '05. Generating sources not available. Fuel costs: 35% of revenues. '11 reported depr. rates: 1.3%-9.3%. Has 18,700 employees. Chairman: Michael G. Morris. President & CEO: Nicholas K. Akins. Inc.: NY. Address: 1 Riverside Plaza, Columbus, OH 43215-2373. Tel.: 614-716-1000. Internet: www.aep.com.

Two rate cases are pending. Indiana Michigan Power filed for a \$146.3 million rate hike in Indiana, based on an 11.15% return on equity. The commission's staff is recommending an increase of just \$28 million, based on a 9.2% ROE. An order is expected by yearend. Another AEP subsidiary, SWEPSCO, asked the Texas commission for an increase of \$83.1 million, based on an 11.25% ROE. Rates should go into effect in the first quarter of 2013.

The regulated operations are faring well. There is less regulatory activity than usual because most of AEP's utilities are earning their allowed ROEs, or are close to doing so. In addition, the company's transmission business should increase its contribution to the bottom line in the coming years, as there are plenty of opportunities to invest capital. Because the regulated picture is generally bright, we think the board of directors will raise the dividend in the fourth quarter, as it did in each of the past two years.

This stock's yield and 2015-2017 total return potential are similar to the utility norms.

Paul E. Debbas, CFA September 21, 2012

(A) Excl. nonrec. gains (losses): '02, (\$3.86); '03, (\$1.92); '04, 24¢; '05, (62¢); '06, (20¢); '07, (20¢); '08, 40¢; '10, (7¢); '11, 89¢; gains (losses) on disc. ops.: '02, (57¢); '03, (32¢); '04, 15¢; '05, 7¢; '06, 2¢; '08, 3¢; '09, (1¢). '09 EPS don't add due to change in shs., '11 due to rounding. Next egs. due late Oct. (B) Div'd historically paid early Mar., June, Sept. & Dec. (C) Incl. intang. in '11: \$18.77/sh. (D) In mill. (E) Rate base: various. Rates all'd on com. eq.: 9.96%-10.9%; earned on avg. com. eq., '10: 9.3%. Regul. Clim.: Avg.

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Company's Financial Strength B++
Stock's Price Stability 100
Price Growth Persistence 60
Earnings Predictability 90

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EMPIRE DISTRICT NYSE-EDE

RECENT PRICE **21.41**

P/E RATIO **16.2** (Trailing: 16.6 Median: 17.0)

RELATIVE P/E RATIO **1.07**

DIV YLD **4.7%**

VALUE LINE

TIMELINESS 3 Lowered 2/17/12
SAFETY 2 Raised 3/23/12
TECHNICAL 3 Lowered 9/7/12
BETA .65 (1.00 = Market)

High: 26.6 22.0 22.5 23.5 25.0 25.1 26.1 23.5 19.4 22.5 23.3 21.9
 Low: 17.5 15.1 17.0 19.5 19.3 20.3 21.1 14.9 11.9 17.6 18.0 19.5

LEGENDS
 0.74 x Dividends p sh
 divided by Interest Rate
 Relative Price Strength
 Options: Yes
 Shaded areas indicate recessions

2015-17 PROJECTIONS

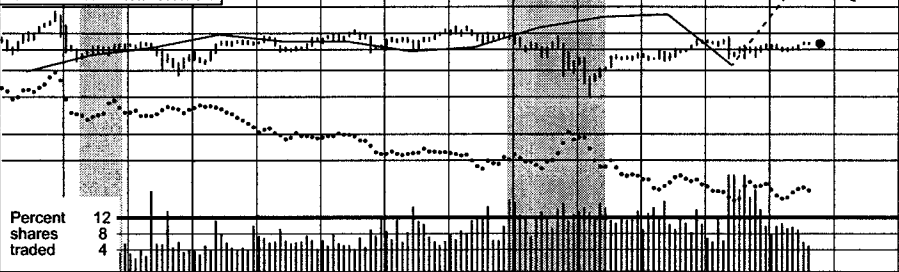
	Price	Gain	Ann'l Total Return
High	25	(+15%)	9%
Low	19	(-10%)	3%

Insider Decisions

	O	N	D	J	F	M	A	M	J
to Buy	0	0	0	0	0	0	0	0	0
to Sell	0	0	1	0	5	0	0	0	0

Institutional Decisions

	4Q2011	1Q2012	2Q2012
to Buy	54	50	50
to Sell	54	58	50
Net's (000)	20129	20044	19674



Target Price	Range
2015	2016
2017	
64	
48	
40	
32	
24	
20	
16	
12	
8	
6	

1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	© VALUE LINE PUB. LLC	15-17
12.53	12.83	14.02	13.94	14.78	13.37	13.56	13.03	12.67	14.80	13.67	14.59	15.25	13.04	13.02	13.74	13.25	13.90	Revenues per sh	16.50
2.67	2.67	2.97	2.89	3.12	2.19	2.43	2.48	2.22	2.45	2.75	2.69	2.91	2.72	2.85	3.21	2.90	3.20	"Cash Flow" per sh	4.00
1.23	1.29	1.53	1.13	1.35	.59	1.19	1.29	.86	.92	1.41	1.09	1.17	1.18	1.17	1.31	1.25	1.40	Earnings per sh ^	1.75
1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	.64	1.00	1.00	Div'd Decl'd per sh ^	1.20
3.79	3.38	3.03	4.14	7.61	4.02	3.43	2.65	1.64	2.83	3.97	5.46	6.28	4.07	2.63	2.44	3.50	3.75	Cap'l Spending per sh	3.25
12.96	13.06	13.43	13.48	13.65	13.58	14.59	15.17	14.76	15.08	15.49	16.04	15.56	15.75	15.82	16.53	16.75	17.15	Book Value per sh ^	18.50
16.44	16.78	17.11	17.37	17.60	19.76	22.57	24.98	25.70	26.08	30.25	33.61	33.98	38.11	41.58	41.98	42.25	42.50	Common Shs Outst'g ^	43.25
14.8	13.9	14.0	21.7	17.7	33.9	16.2	15.8	24.8	24.5	15.9	21.7	17.3	14.3	16.8	15.8	15.8	15.8	Avg Ann'l P/E Ratio	12.5
.93	.80	.73	1.24	1.15	1.74	.88	.90	1.31	1.30	.86	1.15	1.04	.95	1.07	1.00	1.00	1.00	Relative P/E Ratio	.85
7.0%	7.1%	6.0%	5.2%	5.4%	6.4%	6.6%	6.3%	6.0%	5.7%	5.7%	5.4%	6.3%	7.6%	3.1%	3.1%	3.1%	3.1%	Avg Ann'l Div'd Yield	5.5%

CAPITAL STRUCTURE as of 6/30/12
 Total Debt \$710.6 mill. Due in 5 Yrs \$156.5 mill.
 LT Debt \$593.8 mill. LT Interest \$36.2 mill.
 Incl. \$4.6 mill. capitalized leases.
 (LT interest earned: 3.1x)
 Leases, Uncapitalized Annual rentals \$.9 mill.
 Pension Assets-12/11 \$141.0 mill.
 Oblig. \$215.1 mill.

Pfd Stock None

Common Stock 42,328,967 shs.
 as of 8/1/12

MARKET CAP: \$900 million (Small Cap)

ELECTRIC OPERATING STATISTICS

	2009	2010	2011
% Change Retail Sales (KWH)	-4.3	+6.1	-2.3
Avg. Industrial Use (MWH)	2795	2813	2865
Avg. Industrial Rev/KWH (\$)	6.65	6.92	7.72
Capacity at Peak (Mw)	1257	1257	1392
Peak Load, Summer (Mw)	1085	1199	1198
Annual Load Factor (%)	55.4	53.2	52.0
% Change Customers (avg.)	+2	+4	-1.5

Fixed Charge Cov. (%)

	201	248	307
ANNUAL RATES			
of change (per sh)	10 Yrs.	5 Yrs.	to '15-'17
Revenues	-5%	-5%	3.5%
"Cash Flow"	-5%	3.5%	5.5%
Earnings	2.0%	3.0%	6.0%
Dividends	-2.0%	-3.5%	2.0%
Book Value	1.5%	1.0%	2.5%

Fixed Charge Cov. (%)	201	248	307
ANNUAL RATES	Past	Past	Est'd '09-'11
of change (per sh)	10 Yrs.	5 Yrs.	to '15-'17
Revenues	-5%	-5%	3.5%
"Cash Flow"	5%	3.5%	5.5%
Earnings	2.0%	3.0%	6.0%
Dividends	-2.0%	-3.5%	2.0%
Book Value	1.5%	1.0%	2.5%

Cal-endar	QUARTERLY REVENUES (\$ mill.)				Full Year
	Mar.31	Jun.30	Sep.30	Dec.31	
2009	136.0	112.2	128.1	120.9	497.2
2010	139.9	114.5	154.1	132.8	541.3
2011	150.7	129.1	164.3	132.8	576.9
2012	137.1	131.6	156.3	135	560
2013	150	130	165	145	590

Cal-endar	EARNINGS PER SHARE ^A				Full Year
	Mar.31	Jun.30	Sep.30	Dec.31	
2009	.32	.22	.43	.22	1.18
2010	.22	.18	.55	.20	1.17
2011	.29	.22	.60	.21	1.31
2012	.23	.25	.55	.22	1.25
2013	.30	.25	.60	.25	1.40

Cal-endar	QUARTERLY DIVIDENDS PAID B = †				Full Year
	Mar.31	Jun.30	Sep.30	Dec.31	
2008	.32	.32	.32	.32	1.28
2009	.32	.32	.32	.32	1.28
2010	.32	.32	.32	.32	1.28
2011	.32	.32	--	--	.64
2012	.25	.25	.25		

BUSINESS: The Empire District Electric Company supplies electricity to 166,000 customers in a 10,000 sq. mi. area in Missouri (89% of '11 retail elec. revs.), Kansas (5%), Oklahoma (3%), & Arkansas (3%). Acquired Missouri Gas (43,000 customers) 6/06. Supplies water service and has a small fiber-optics operation. Electric revenue breakdown: residential, 43%; commercial, 30%; industrial,

Empire District Electric has filed an electric rate case in Missouri. The utility is seeking a base rate increase of \$30.7 million (7.6%), based on a return on equity of 10.6%. Empire District asked the state commission for an interim tariff hike of \$6.2 million (for costs associated with the tornado that hit Joplin in May of 2011) that would have taken effect 30 days after the filing, which occurred on July 6th, but the regulators turned down the request. (Whether they will grant interim rate relief at some point is to be determined.) An order is due 11 months after the filing. Separately, the utility is asking for a water rate increase of \$516,400 (29.6%), since it hasn't had a rate boost since 2006. A ruling is likely by yearend.

We have raised our 2012 earnings estimate by a nickel a share, to \$1.25. That's because favorable weather conditions helped lift June-quarter results. Our revised estimate is near the upper end of management's targeted range of \$1.13-\$1.27 a share.

The service area continues to recover from the aforementioned tornado. Immediately after the tornado hit Joplin,

some 8,000 customers had lost their homes or businesses. This figure fell to 1,800 as of yearend, and 1,100 as of mid-2012. Electricity usage from FEMA trailers and hotels that were more full than usual (thanks to relief workers) offset part of the lost revenues. Some large customers won't complete their rebuilding until next year or even 2014, however.

We estimate that earnings will advance to \$1.40 a share in 2013. We assume that the rate order in Missouri is reasonable, and that additional customers return to service. If our forecast is correct, Empire District will attain its highest share profits since 2006, and its second-highest since 1998. However, we expect no dividend increase until 2014 because the payout ratio is on the high side.

This stock's dividend yield is fractionally above the utility average. Dividend growth potential over the next 3 to 5 years is low, however, and total return prospects over that time frame are only average for this industry. This equity is best suited for investors seeking a high current yield.

Paul E. Debbas, CFA September 21, 2012

RECENT PRICE	67.76	P/E RATIO	12.1 (Trailing: 9.9 Median: 14.0)	RELATIVE P/E RATIO	0.80	DIV'D YLD	4.9%	VALUE LINE
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[illegible]

CAPITAL STRUCTURE as of 6/30/12	8305.0	9195.0	10124	10106	10932	11484	13094	10746	11488	11229	10300	10350	Revenues (\$mill)	11500		
Total Debt \$12533 mill. Due in 5 Yrs \$2479.0 mill.	878.4	874.2	933.1	943.1	1160.9	1160.0	1240.5	1251.1	1270.3	1367.4	940	805	Net Profit (\$mill)	905		
LT Debt \$12005 mill. LT Interest \$540.0 mill.	25.1%	35.9%	28.2%	37.2%	27.6%	30.7%	32.7%	33.6%	32.7%	17.3%	18.5%	34.0%	Income Tax Rate	34.0%		
Incl. \$1020 mill. of securitization bonds.	6.4%	8.7%	7.0%	8.0%	5.5%	5.8%	5.6%	7.4%	7.4%	8.9%	15.0%	14.0%	AFUDC % to Net Profit	12.0%		
(LT interest earned: 3.6x)	45.7%	44.8%	44.7%	51.9%	51.2%	54.3%	58.2%	55.3%	56.3%	52.2%	53.5%	55.0%	Long-Term Debt Ratio	57.5%		
Leases, Uncapitalized Annual rentals \$84.9 mill.	50.6%	53.2%	52.9%	45.5%	46.7%	43.9%	40.2%	43.1%	42.1%	46.4%	45.5%	43.5%	Common Equity Ratio	41.0%		
Pension Assets-12/11 \$3.40 bill.	Oblig. \$5.19 bill.		15499	16361	15696	17013	17539	17902	19795	19985	20166	19324	20050	20550	Total Capital (\$mill)	23600
Pfd Stock \$280.5 mill. Pfd Div'd \$20.0 mill.	17195	18299	18696	19197	19438	20974	22429	23389	23848	25609	26350	26650			Net Plant (\$mill)	27200
6,115,105 shs. \$4.20 to \$7.88, \$100 par; 1,000,000 shs. 11.50%, all without sinking fund.	7.3%	6.8%	7.4%	6.8%	8.0%	7.9%	7.5%	7.6%	7.7%	8.5%	6.0%	5.5%	Return on Total Cap'l	5.5%		
Common Stock 177,319,259 shs.	10.4%	9.7%	10.8%	11.5%	13.6%	14.2%	15.0%	14.0%	14.4%	14.8%	10.0%	8.5%	Return on Shr. Equity	9.0%		
as of 7/31/12	10.9%	9.8%	11.0%	11.9%	13.8%	14.4%	15.3%	14.3%	14.7%	15.0%	10.0%	9.0%	Return on Com Equity	9.0%		

Fixed Charge Cov. (%)	355	342	339
ANNUAL RATES	Past	Past	Est'd '09-'11
of change (per sh)	10 Yrs.	5 Yrs.	to '15-'17
Revenues	4.0%	4.5%	1.5%
"Cash Flow"	10.0%	11.5%	1.0%
Earnings	9.5%	8.5%	-5.0%
Dividends	10.0%	9.0%	1.0%
Book Value	4.5%	4.5%	3.0%

Calendar	QUARTERLY DIVIDENDS PAID \$ = ¢				Full Year
	Mar.31	Jun.30	Sep.30	Dec.31	
2008	.75	.75	.75	.75	3.00
2009	.75	.75	.75	.75	3.00
2010	.75	.83	.83	.83	3.24
2011	.83	.83	.83	.83	3.32
2012	.83	.83	.83		

<p>(A) Diluted EPS. Excl. nonrecur. gains (losses): '97, '\$1.22; '98, 78¢; '01, '15; '02, '\$1.04; '03, 33¢ net; '05, 21¢; '12, '\$1.26). '10 EPS net add due to rounding. Net earnings report</p>	<p>due late Oct. (B) Div'ds historically paid in early Mar., June, Sept. and Dec. ■ Div'd reinvestment plan available. † Shareholder investment plan available. (C) Incl. deferred charges. In</p>	<p>'11: \$34.05/sh. (D) In mill. (E) Rate base: net orig. cost. Allowed return on equity (blended): 10.5%; earned on avg. com. eq., '11: 15.4%. Regulatory Climate: Average.</p>	<p>Company's Financial Strength Stock's Price Stability Price Growth Persistence Earnings Predictability</p>	<p>A 100 55 95</p>
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GREAT PLAINS EN'GY NYSE-GXP

RECENT PRICE **21.76**

P/E RATIO **14.3** (Trailing: 17.3; Median: 15.0)

RELATIVE P/E RATIO **0.94**

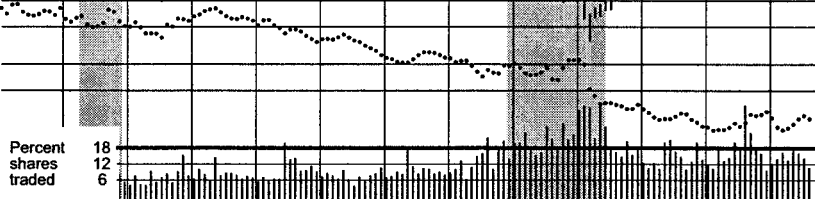
DIV'D YLD **4.0%**

VALUE LINE

TIMELINESS 3 Lowered 3/9/12
SAFETY 3 Lowered 12/26/08
TECHNICAL 3 Raised 8/10/12
BETA .75 (1.00 = Market)

High: 27.6 27.0 32.8 35.7 32.8 32.8 33.4 29.3 20.5 19.9 22.1 22.5
 Low: 23.2 15.7 21.4 27.9 27.1 27.1 26.9 15.6 10.2 16.6 16.3 19.5

LEGENDS
 0.77 x Dividends p sh
 divided by Interest Rate
 Relative Price Strength
 Options: Yes
 Shaded areas indicate recessions



2015-17 PROJECTIONS
 Price **25** Gain **(+15%)** Ann'l Total Return **7%**
 High **25** Low **17** Gain **(-20%)** Return **-1%**

Insider Decisions
 O N D J F M A M J
 to Buy 0 0 0 0 0 0 0 1 0
 Options 0 0 0 0 0 0 0 0 0
 to Sell 0 0 0 0 0 0 0 0 0

Institutional Decisions
 4Q2011 1Q2012 2Q2012
 to Buy 115 105 114
 to Sell 110 116 106
 Hld's(000) 94551 102697 107362

Percent shares traded 18 12 6

% TOT. RETURN 8/12
 THIS STOCK VS. ARITH. INDEX
 1 yr. 13.7 11.2
 3 yr. 38.6 47.4
 5 yr. -2.9 27.8

1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	© VALUE LINE PUB. LLC	15-17
14.60	14.47	15.17	14.50	18.02	23.61	26.91	31.04	33.13	34.85	33.30	37.89	14.00	14.51	16.62	17.03	15.65	16.30	Revenues per sh	19.50
3.90	3.91	4.21	3.63	4.63	4.70	4.40	4.69	4.75	4.54	3.86	4.24	3.09	3.27	4.12	3.51	3.45	3.70	"Cash Flow" per sh	4.75
1.69	1.69	1.89	1.26	2.05	1.59	2.04	2.27	2.46	2.18	1.62	1.86	1.16	1.03	1.53	1.25	1.35	1.40	Earnings per sh ^A	1.75
1.59	1.62	1.64	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	1.66	.83	.83	.84	.86	.88	Div'd Decl'd per sh ^B	1.10
1.66	2.05	1.97	2.97	6.67	4.38	1.91	2.19	2.66	4.49	6.05	6.15	8.86	6.49	4.76	3.40	4.15	5.15	Cap'l Spending per sh	4.00
14.71	14.19	14.41	13.97	14.88	12.59	13.58	13.82	15.35	16.37	16.70	18.18	21.39	20.62	21.26	21.74	21.70	22.20	Book Value per sh ^C	24.00
61.91	61.91	61.91	61.91	61.91	61.91	69.20	69.26	74.37	74.74	80.35	86.23	119.26	135.42	135.71	136.14	153.50	153.50	Common Shs Outst'g ^D	153.50
15.9	17.0	15.7	20.0	12.4	15.9	11.1	12.2	12.6	14.0	18.3	16.3	20.5	16.0	12.1	16.1	Bold figures are Value Line estimates		Avg Ann'l P/E Ratio	12.0
1.00	.98	.82	1.14	.81	.81	.61	.70	.67	.75	.99	.87	1.23	1.07	.77	1.02			Relative P/E Ratio	.80
5.9%	5.6%	5.5%	6.6%	6.5%	6.6%	7.3%	6.0%	5.4%	5.5%	5.6%	5.5%	7.0%	5.0%	4.5%	4.1%			Avg Ann'l Div'd Yield	5.3%

CAPITAL STRUCTURE as of 6/30/12
 Total Debt \$3804.5 mill. Due in 5 Yrs \$1079.6 mill.
 LT Debt \$3013.4 mill. LT Interest \$172.3 mill.
 (LT interest earned: 2.2x)

Leases, Uncapitalized Annual rentals \$19.7 mill.
 Pension Assets-12/11 \$591.1 mill.
 Oblig. \$980.6 mill.

Pfd Stock \$39.0 mill. Pfd Div'd \$1.6 mill.
 390,000 shs. 3.80% to 4.50% (all \$100 par & cum.), callable from \$101 to \$103.70.
 Common Stock 153,430,889 shs.
 as of 8/6/12

MARKET CAP: \$3.3 billion (Mid Cap)

	2009	2010	2011
% Change Retail Sales (KWH)	+18.1	+5.6	-1.7
Avg. Indust. Use (MWH)	1367	1429	1463
Avg. Indust. Revs. per KWH (\$)	5.47	5.89	6.11
Capacity at Peak (Mw)	6336	6272	6697
Peak Load, Summer (Mw)	5347	5531	5690
Annual Load Factor (%)	51.3	52.8	50.5
% Change Customers (avg.)	-1.2	+2	--

Fixed Charge Cov. (%) 144 218 211

ANNUAL RATES	Past 10 Yrs.	Past 5 Yrs.	Est'd '09-'11
of change (per sh)			
Revenues	-1.5%	-14.0%	3.5%
"Cash Flow"	-1.5%	-3.5%	4.5%
Earnings	-2.5%	-9.5%	5.5%
Dividends	-6.5%	-13.0%	5.0%
Book Value	4.5%	5.5%	2.0%

Cal-endar	QUARTERLY REVENUES (\$ mill.)	Full Year
	Mar.31 Jun.30 Sep.30 Dec.31	
2009	419.2 480.5 587.7 477.6	1965.0
2010	506.9 552.0 728.8 467.8	2255.5
2011	492.9 565.1 773.7 486.3	2318.0
2012	479.7 603.6 816.7 500	2400
2013	550 600 800 550	2500

Cal-endar	EARNINGS PER SHARE ^A	Full Year
	Mar.31 Jun.30 Sep.30 Dec.31	
2009	.05 .28 .57 .10	1.03
2010	.15 .47 .96 d.04	1.53
2011	.01 .31 .91 .01	1.25
2012	d.07 .41 .91 .10	1.35
2013	.10 .30 .90 .10	1.40

Cal-endar	QUARTERLY DIVIDENDS PAID ^B	Full Year
	Mar.31 Jun.30 Sep.30 Dec.31	
2008	.415 .415 .415 .415	1.66
2009	.2075 .2075 .2075 .2075	.83
2010	.2075 .2075 .2075 .2075	.83
2011	.2075 .2075 .2075 .2125	.84
2012	.2125 .2125 .2125 .2125	

BUSINESS: Great Plains Energy Incorporated is a holding company for Kansas City Power & Light and two other subsidiaries, which supply electricity to 824,000 customers in western Missouri (71% of revenues) and eastern Kansas (29%). Acq'd Aquila 7/08. Sold Strategic Energy (energy-marketing subsidiary) in '08. Electric revenue breakdown: residential, 41%; commercial, 38%; industrial, 8%;

As usual, Great Plains Energy's utility subsidiaries have rate cases pending. The company's utilities have not been earning their allowed returns on equity in recent years, so they have been filing rate applications frequently in order to reduce the effects of regulatory lag and weak volume. Great Plains' utilities asked the Missouri commission for tariff hikes totaling \$189.2 million, based on a return of 10.4% on a 52.5% common-equity ratio. The company is also asking the state regulators to grant it tracking mechanisms to recover rising property taxes and earn a return on transmission expenditures. New rates are expected to go into effect in late January. Kansas City Power & Light asked the Kansas commission for a rate increase of \$63.6 million, based on a 10.4% return on a 51.8% common-equity ratio. New tariffs are expected to take effect at the start of 2013. Even if the utilities receive reasonable rate orders, they are likely to under-earn their allowed ROEs again next year. **We have raised our 2012 earnings estimate by \$0.15 a share, to \$1.35.** Favorable weather conditions helped lift June-period results, and the higher-than-normal

temperatures continued into the third quarter. Our revised estimate is still within management's targeted range of \$1.20-\$1.40.

We look for only a moderate share-earnings increase in 2013. We assume reasonable regulatory treatment, but we also base our forecast on a return to normal weather patterns. Also, average shares outstanding will be higher due to the 17.1 million shares that Great Plains issued in June of 2012 for the conversion of some debt into equity.

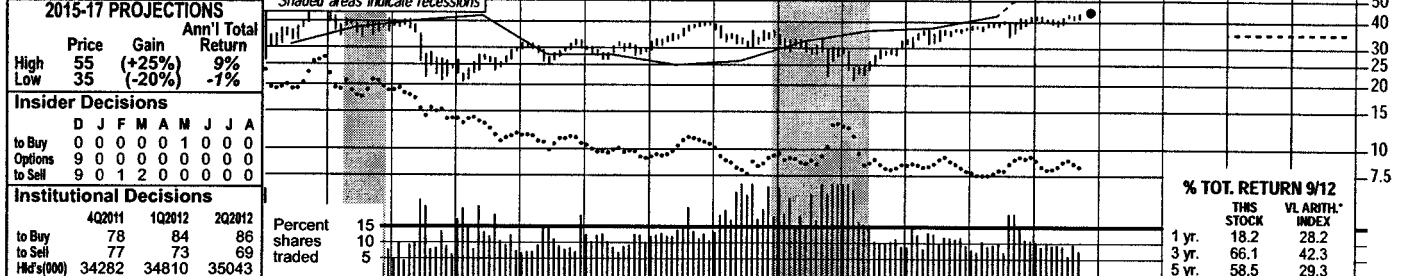
The Wolf Creek nuclear unit has room for improvement. The plant, 47%-owned by KCP&L, had a refueling outage in 2011 that was much longer than expected, and then had an unplanned outage in the first quarter of 2012. Its next refueling outage is scheduled for the first quarter of 2013.

We are not enthusiastic about this stock. The yield (even assuming a dividend hike in the fourth quarter) is only about equal to the utility average, and with the quotation well within our 2015-2017 Target Price Range, total return potential is unimpressive.

Paul E. Debbas, CFA September 21, 2012

IDACORP, INC. NYSE-IDA										RECENT PRICE	44.46	P/E RATIO	13.3 (Trailing: 12.5 Median: 15.0)	RELATIVE P/E RATIO	0.87	DIV'D YLD	3.4%	VALUE LINE	
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TIMELINESS 3 Lowered 5/14/10	High: 49.4	41.0	30.2	32.9	32.1	40.2	39.2	35.1	32.8	37.8	42.7	45.0							
SAFETY 3 Lowered 2/14/03	Low: 33.6	20.9	20.6	25.3	26.2	29.0	30.1	21.9	20.9	30.0	33.9	38.2							
TECHNICAL 3 Lowered 9/28/12																			
BETA .70 (1.00 = Market)																			



2015-17 PROJECTIONS	Price	Gain	Ann'l Total Return	High	Low	55	35	(+25%)	(-20%)	9%	-1%
Insider Decisions	D	J	F	M	A	M	J	J	A		
to Buy	0	0	0	0	0	1	0	0	0		
Options	9	0	0	0	0	0	0	0	0		
to Sell	9	0	1	2	0	0	0	0	0		
Institutional Decisions	4Q2011	1Q2012	2Q2012								
to Buy	78	84	86								
to Sell	77	73	69								
Hds(000)	34282	34810	35043								
Percent shares traded	15	10	5								
% TOT. RETURN 9/12	1 yr.	18.2	28.2								
	3 yr.	66.1	42.3								
	5 yr.	58.5	29.3								

CAPITAL STRUCTURE as of 6/30/12 Total Debt \$1537.6 mill. Due in 5 Yrs \$175.3 mill. LT Debt \$1536.5 mill. LT Interest \$70.0 mill. (LT interest earned: 2.5x)	928.8	782.7	844.5	859.5	926.3	879.4	960.4	1049.8	1036.0	1026.8	1150	1175	Revenues (\$mill)	1300
	66.3	40.1	77.8	63.7	100.1	82.3	98.4	124.4	142.5	166.9	165	160	Net Profit (\$mill)	180
	--	--	--	16.9%	13.3%	14.3%	16.3%	15.2%	NMF	NMF	25.0%	30.0%	Income Tax Rate	30.0%
Pension Assets-12/11 \$390.1 mill. Oblig. \$655.4 mill.	3.0%	7.5%	3.9%	4.7%	4.0%	9.7%	10.2%	10.5%	19.7%	22.8%	25.0%	25.0%	AFUDC % to Net Profit	30.0%
	49.2%	50.8%	49.3%	50.0%	45.2%	48.9%	47.6%	50.2%	49.3%	45.6%	46.0%	46.5%	Long-Term Debt Ratio	47.5%
	47.9%	46.4%	50.7%	50.4%	54.8%	51.1%	52.4%	49.8%	50.7%	54.4%	54.0%	53.5%	Common Equity Ratio	52.5%
Pfd Stock None	1826.9	1862.5	1987.8	2040.8	2052.8	2364.2	2485.9	2807.1	3020.4	3045.2	3255	3430	Total Capital (\$mill)	4000
	1906.5	2088.3	2209.5	2314.3	2419.1	2616.6	2758.2	2917.0	3161.4	3406.6	3680	3975	Net Plant (\$mill)	5000
	5.1%	3.7%	5.3%	4.5%	6.2%	4.7%	5.3%	5.7%	6.0%	6.7%	6.0%	6.0%	Return on Total Cap'l	5.5%
Common Stock 50,154,714 shs. as of 7/27/12	7.1%	4.4%	7.7%	6.2%	8.9%	6.8%	7.6%	8.9%	9.3%	10.1%	9.5%	8.5%	Return on Shr. Equity	8.5%
	7.0%	4.2%	7.2%	6.2%	8.9%	6.8%	7.6%	8.9%	9.3%	10.1%	9.5%	8.5%	Return on Com Equity	8.5%
	NMF	NMF	2.7%	1.3%	4.3%	2.4%	3.4%	4.8%	5.5%	6.5%	5.5%	4.5%	Retained to Com Eq	4.0%
MARKET CAP: \$2.2 billion (Mid Cap)	113%	NMF	65%	80%	51%	64%	55%	46%	41%	36%	42%	48%	All Div'ds to Net Prof	56%
ELECTRIC OPERATING STATISTICS														

CAPITAL STRUCTURE as of 6/30/12	928.8	782.7	844.5	859.5	926.3	879.4	960.4	1049.8	1036.0	1026.8	1150	1175	Revenues (\$mill)	1300
Total Debt \$1537.6 mill. Due in 5 Yrs \$175.3 mill.	66.3	40.1	77.8	63.7	100.1	82.3	98.4	124.4	142.5	166.9	165	160	Net Profit (\$mill)	180
LT Debt \$1536.5 mill. LT Interest \$70.0 mill.													Income Tax Rate	30.0%
(LT interest earned: 2.5x)													AFUDC % to Net Profit	30.0%
Pension Assets-12/11 \$390.1 mill.	3.0%	7.5%	3.9%	4.7%	4.0%	9.7%	10.2%	10.5%	19.7%	22.8%	25.0%	25.0%	Long-Term Debt Ratio	47.5%
Oblig. \$655.4 mill.	49.2%	50.8%	49.3%	50.0%	45.2%	48.9%	47.6%	50.2%	49.3%	45.6%	46.0%	46.5%	Common Equity Ratio	52.5%
Pfd Stock None	47.9%	46.4%	50.7%	50.0%	54.8%	51.1%	52.4%	49.8%	50.7%	54.4%	54.0%	53.5%	Total Capital (\$mill)	4000
Common Stock 50,154,714 shs.	1826.9	1862.5	1987.8	2048.8	2052.8	2364.2	2485.9	2807.1	3020.4	3045.2	3255	3430	Net Plant (\$mill)	5000
as of 7/27/12	1906.5	2088.3	2209.5	2314.3	2419.1	2616.6	2758.2	2917.0	3161.4	3406.6	3680	3975	Return on Total Cap'l	5.5%
MARKET CAP: \$2.2 billion (Mid Cap)	5.1%	3.7%	5.3%	4.5%	6.2%	4.7%	5.3%	5.7%	6.0%	6.7%	6.0%	6.0%	Return on Shr. Equity	8.5%
ELECTRIC OPERATING STATISTICS	7.1%	4.4%	7.7%	6.2%	8.9%	6.8%	7.6%	8.9%	9.3%	10.1%	9.5%	8.5%	Return on Com Equity E	8.5%
% Change Retail Sales (KWH)	7.0%	4.2%	7.2%	6.2%	8.9%	6.8%	7.6%	8.9%	9.3%	10.1%	9.5%	8.5%	Retained to Com Eq	4.0%
Avg. Indust. Use (MWH)	NMF	NMF	65%	80%	51%	64%	55%	46%	5.5%	6.5%	5.5%	4.5%	All Div'ds to Net Prof	56%
Avg. Indust. Revs. per KWH (\$)	113%								41%	36%	42%	48%		
Capacity at Peak (Mw)														
Peak Load, Summer (Mw)														
Annual Load Factor (%)														
% Change Customers (y-end)														

BUSINESS: IDACORP, Inc. is the holding company for Idaho Power, a utility that operates 17 hydroelectric generation developments, 2 natural gas-fired plants, and partly owns three coal plants across Idaho, Oregon, Wyoming, and Nevada. Service territory covers 24,000 square miles with estimated population of one million. Sells electricity in Idaho (95% of revenues) and Oregon (5%). Revenue breakdown: residential, 39%; commercial, 21%; industrial, 13%; other, 27%. Fuel sources: hydro, 59%; thermal, 27%; purchased power, 14%. '11 depreciation rate: 2.4%. Has 2,058 employees. Chairman: Gary G. Michael. President & CEO: J. LaMont Keen. Incorporated: Idaho. Address: 1221 W. Idaho St., Boise, ID. 83702. Telephone: 208-388-2200. Internet: www.idacorpinc.com.

IDACORP posted strong second-quarter profit comparisons. Earnings advanced nearly 70% over the year-earlier figure, to \$0.71 a share. Indeed, the impressive results can be attributed to increasing energy sales, coupled with rising sales and higher retail base rates. Notably, sales from irrigation customers practically doubled, compared to last year, due to warmer temperatures and lower precipitation levels.

Management raised its guidance for 2012. Share earnings are now forecasted to reach between \$3.20 and \$3.35, largely due to better-than-expected second-quarter results. Thus, we have increased our estimate for 2012 by \$0.30 a share, to \$3.30. (Subscribers should note that September-period earnings were scheduled to be released after we rolled the presses on this Issue.) What's more, IDA expects to exceed a minimum return of 9.5% without the use of additional accumulated deferred investment tax credits (ADITCs), and revised its estimate down from the \$5 million previously forecasted. In fact, during the second quarter, the company reversed the \$0.8 million used during the March-period.

In other news, its Boardman to Hemingway (B2H) project has hit a roadblock. The service date of the Boardman (Oregon) to Hemingway (Idaho) transmission line has been delayed due to governmental and environmental headwinds. It is now expected to be completed no earlier than 2018, versus the previous target of 2016.

The board of directors increased the dividend approximately 15%, to \$0.38 a share (payable November 30th). Indeed, this will be the second dividend increase in 2012, and the first at yearend since 2004. We expect further improvement on this front, as the company intends to boost its dividend payout ratio to be between 50% and 60% of net profit over the long-term.

Income-seeking accounts may want to look elsewhere. Despite the rising dividend, the 3.4% yield remains below the utility industry average. However, investors should keep in mind that we do expect the measure to become more comparable to its industry peers over the long term.

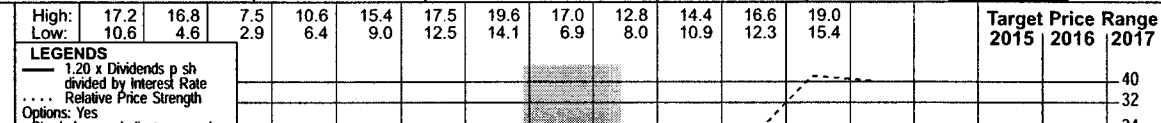
Company's Financial Strength	B+
Stock's Price Stability	100
Price Growth Persistence	65
Earnings Predictability	85

To subscribe call 1-800-833-0046.

NV ENERGY, INC. NYSE-NVE

RECENT PRICE **18.56** P/E RATIO **14.7** (Trailing: 19.3 Median: 19.0) RELATIVE P/E RATIO **0.97** DIV YLD **3.9%** VALUE LINE

TIMELINESS 2 Lowered 10/26/12
SAFETY 3 Raised 2/10/06
TECHNICAL 2 Raised 10/26/12
BETA .85 (1.00 = Market)



2015-17 PROJECTIONS

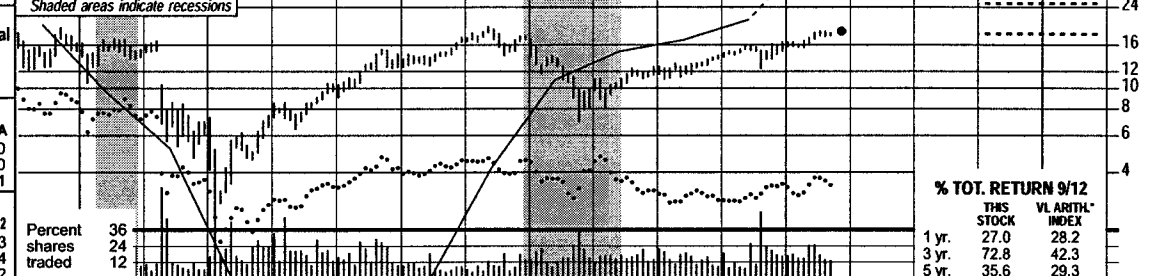
	Price	Gain	Ann'l Total Return
High	25	(+35%)	11%
Low	18	(-5%)	3%

Insider Decisions

	D	J	F	M	A	M	J	J	A
to Buy	0	0	0	1	0	0	0	0	0
Options	0	0	1	0	0	1	0	0	0
to Sell	0	0	0	3	0	2	0	0	1

Institutional Decisions

	4Q2011	1Q2012	2Q2012
to Buy	116	108	143
to Sell	104	115	114
Mid's (000)	202846	206533	200812



1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	© VALUE LINE PUB. LLC	15-17
16.51	15.86	17.04	16.69	29.75	44.94	29.28	23.79	24.04	15.09	15.18	15.41	15.06	15.27	13.94	12.47	12.70	12.90	Revenues per sh	13.75
2.97	3.04	3.12	2.10	1.45	1.94	d1.27	2.75	4.65	2.42	2.89	2.91	2.02	3.45	3.48	2.91	3.60	3.70	"Cash Flow" per sh	4.25
1.56	1.65	1.64	.83	d.63	.34	d3.00	d1.15	.40	.44	1.14	.89	.89	.78	.96	.69	1.25	1.25	Earnings per sh ^A	1.50
1.60	1.60	1.45	1.17	1.00	.40	.20	--	--	--	--	.16	.34	.41	.45	.49	.64	.74	Div'd Decl'd per sh ^B	1.00
3.84	4.41	6.31	3.95	4.58	3.28	3.91	3.19	3.68	3.42	4.46	5.12	4.54	3.69	2.79	2.68	2.10	2.05	Cap'l Spending per sh	1.50
16.40	16.54	16.86	18.83	17.33	16.60	12.99	12.24	12.76	10.26	11.86	12.82	13.36	13.73	14.24	14.43	15.05	15.55	Book Value per sh ^C	17.25
48.79	50.40	51.27	78.43	78.48	102.11	102.18	117.24	117.47	200.79	221.03	233.74	234.32	234.83	235.32	236.00	236.00	236.00	Common Shs Outst'g ^D	236.00
13.3	12.9	15.2	25.7	--	NMF	--	--	20.9	27.5	12.6	19.1	13.3	13.9	13.2	21.7	21.7	21.7	Avg Ann'l P/E Ratio Relative P/E Ratio Avg Ann'l Div'd Yield	15.0
.83	.74	.79	1.46	--	NMF	--	--	1.10	1.46	.68	1.01	.80	.93	.84	1.37	1.37	1.37		1.00
7.7%	7.5%	5.8%	5.5%	6.5%	2.7%	2.2%	--	--	--	--	.9%	2.9%	3.8%	3.6%	3.3%	3.3%	3.3%		4.5%

CAPITAL STRUCTURE as of 6/30/12
 Total Debt \$5138.4 mill. Due in 5 Yrs \$1626.9 mill.
 LT Debt \$5130.3 mill. LT Interest \$292.4 mill.
 Incl. \$51.3 mill. capitalized leases.
 (LT interest earned: 2.2x)

Leases, Uncapitalized Annual rentals \$18.0 mill.
Pension Assets-12/11 \$811.5 mill.
Oblig. \$842.1 mill.

Pfd Stock None
Common Stock 235,999,750 shs.
as of 8/1/12
MARKET CAP: \$4.4 billion (Mid Cap)

ELECTRIC OPERATING STATISTICS

	2009	2010	2011
% Change Retail Sales (KWH)	-2.7	-1.4	-1.9
Av. Indust. Use (MWH)	NA	NA	NA
Av. Indust. Revs. per KWH (\$)	NA	NA	NA
Capacity at Peak (MW)	NA	NA	NA
Peak Load, Summer (MW)	7140	7215	7052
Annual Load Factor (%) ^F	43.0	43.0	43.0
% Change Customers (yr-end)	+1	+3	-2.8

Fixed Charge Cov. (%)

	159	181	181
2009	159	181	181
2010	159	181	181
2011	159	181	181

ANNUAL RATES

	Past 10 Yrs.	Past 5 Yrs.	Est'd '09-'11
change (per sh)	10 Yrs.	5 Yrs.	to '15-'17
Revenues	-7.5%	-5.0%	Nil
"Cash Flow"	6.0%	--	4.5%
Earnings	16.0%	4.0%	11.0%
Dividends	-6.0%	--	14.0%
Book Value	-2.0%	4.0%	3.5%

QUARTERLY REVENUES (\$ mill.)

Calendar	Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2009	755.3	838.6	1219.0	772.9	3585.8
2010	714.5	782.7	1128.0	655.0	3280.2
2011	641.0	674.9	1017.8	609.6	2943.3
2012	611.4	740.7	1050	597.9	3000
2013	625	725	1100	600	3050

EARNINGS PER SHARE A

Calendar	Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2009	d.09	.08	.78	.02	.78
2010	d.01	.16	.75	.06	.96
2011	.01	.05	.73	d.11	.69
2012	.05	.29	.86	.05	1.25
2013	.06	.26	.87	.06	1.25

QUARTERLY DIVIDENDS PAID B

Calendar	Mar.31	Jun.30	Sep.30	Dec.31	Full Year
2008	.08	.08	.08	.10	.34
2009	.10	.10	.10	.11	.41
2010	.11	.11	.11	.12	.45
2011	.12	.12	.12	.13	.49
2012	.13	.17	.17		

2991.7	2789.2	2823.8	3030.2	3356.0	3601.0	3528.1	3585.8	3280.2	2943.3	3000	3050	Revenues (\$mill)	3250
d302.1	d129.4	75.3	86.2	238.9	197.3	208.9	182.9	227.0	163.4	300	300	Net Profit (\$mill)	365
--	--	34.5%	33.4%	34.1%	30.7%	31.3%	29.2%	33.4%	34.7%	33.0%	33.0%	Income Tax Rate	33.0%
--	--	19.3%	52.2%	14.8%	29.3%	32.5%	24.3%	22.7%	12.0%	5.0%	4.0%	AFUDC % to Net Profit	4.0%
70.2%	70.7%	72.5%	64.4%	60.4%	58.0%	62.7%	62.2%	59.5%	59.5%	57.5%	55.5%	Long-Term Debt Ratio	51.5%
28.7%	28.3%	26.6%	34.8%	39.6%	42.0%	37.3%	37.8%	40.5%	40.5%	42.5%	44.5%	Common Equity Ratio	48.5%
4628.9	5065.1	5629.9	5927.3	6623.8	7134.4	8398.2	8527.3	8274.9	8415.0	8310	8240	Total Capital (\$mill)	8325
4308.7	4642.7	4926.9	5397.6	6087.0	7011.0	8310.3	8665.6	8929.7	9227.1	9315	9375	Net Plant (\$mill)	9150
NMF	.4%	4.1%	4.0%	5.8%	4.7%	4.3%	4.1%	4.8%	3.7%	5.5%	5.5%	Return on Total Cap'l	6.0%
NMF	NMF	4.9%	4.1%	9.1%	6.6%	6.7%	5.7%	6.8%	4.8%	8.5%	8.0%	Return on Shr. Equity	9.0%
NMF	NMF	4.8%	4.0%	9.0%	6.6%	6.7%	5.7%	6.8%	4.8%	8.5%	8.0%	Return on Com Equity E	9.0%
NMF	NMF	4.8%	4.0%	9.0%	5.4%	4.1%	2.7%	3.6%	1.4%	4.0%	3.5%	Retained to Com Eq	3.0%
NMF	NMF	5%	5%	1%	18%	38%	53%	47%	71%	51%	59%	All Div'ds to Net Prof	65%

BUSINESS: NV Energy, Inc. (formerly Sierra Pacific Resources) is a holding company formed through the 7/99 merger of Sierra Pacific (now NV Energy North) and Nevada Power (now NV Energy South). Sells electricity in west central & southern Nevada & eastern California; provides gas to Reno & Sparks, NV & environs. Customers: 1.2 mill. elec., 152,000 gas. Elec. rev. breakdown: res'l, 45%; comm'l, 25%; ind'l, 27%; other, 3%. Generating sources: gas, 49%; coal, 15%; purchased, 36%. Fuel costs: 47% of revs. '11 reported depr. rates: South, 3.0%; North, 2.9%. Has 2,800 employees. Chairman: Philip G. Satre. President & CEO: Michael W. Yackira. Inc.: NV. Address: 6226 West Sahara Ave., Las Vegas, NV 89146. Tel.: 702-402-5000. Internet: www.nvenergy.com.

We have raised our 2012 earnings estimate for NV Energy by \$0.05 a share, to \$1.25. That's the upper end of management's targeted range of \$1.15-\$1.25 a share. Due to hotter-than-normal weather, profits in the June quarter exceeded our expectation. The company estimates that favorable weather conditions added \$0.07 a share to the bottom line in the period, compared with normal weather.

Earnings were headed up this year, anyway. The key reason is the \$158.6 million rate increase that NV Energy South received at the start of 2012. Interest expense is declining, as the company has retired debt or taken advantage of low interest rates when refinancing its borrowings. Cost control has been effective, too.

We forecast flat earnings in 2013. We assume a return to normal weather patterns. Also, with the service area's economy still feeling the aftereffects of the housing crisis, NV Energy's two utilities can't count on much load growth. On the positive side, we believe that interest expense will decline again.

How will NV Energy use its free cash? With the capital budget well below the levels seen in the previous decade, and the benefits of tax-loss carryforwards, the company is generating surplus cash. Higher dividends are one way for NV Energy to use its funds. Indeed, the board of directors boosted the quarterly disbursement by \$0.04 a share (30.8%) in the second quarter. (The expectation and realization of a hefty increase have helped lift the share price by more than 10% since the start of 2012.) The company has signaled that raises of at least 10% are achievable in the next few years. Other potential uses of surplus cash are further debt reduction and new investments.

NV Energy is building a transmission line. The company will have a 25% stake in the ON Line, which will connect northern and southern Nevada. Its stake is estimated at \$138 million. The project is expected to be in service by the end of 2013.

This timely stock's yield is a bit below the utility mean. This is understandable, given the good dividend growth prospects. Strong dividend growth to 2015-2017 should produce a total return that is just slightly above the industry average.

RECENT PRICE	52.86	P/E RATIO	15.0 (Trailing: 15.6 Median: 14.0)	RELATIVE P/E RATIO	0.99	DIV'D YLD	4.2%	VALUE LINE
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1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	© VALUE LINE PUB. LLC	15-17
20.77	23.52	25.12	28.57	43.50	53.66	28.90	30.87	31.59	30.16	34.03	35.07	33.37	32.50	30.01	29.67	30.90	32.00	Revenues per sh	33.00
5.90	7.12	7.34	7.73	7.99	8.72	7.01	7.33	6.93	5.76	9.70	9.29	8.13	8.08	6.85	7.52	7.80	7.95	"Cash Flow" per sh	8.75
2.47	2.76	2.85	3.18	3.35	3.68	2.53	2.52	2.58	2.24	3.17	2.96	2.12	2.26	3.08	2.99	3.45	3.50	Earnings per sh ^A	3.75
1.03	1.13	1.23	1.33	1.43	1.53	1.63	1.73	1.83	1.93	2.03	2.10	2.10	2.10	2.10	2.10	2.12	2.20	Div'd Dec'd per sh ^B	2.45
2.95	3.63	3.76	4.05	7.76	12.27	9.81	7.60	5.86	6.39	7.59	9.37	9.46	7.64	7.03	8.26	8.45	9.60	Cap'l Spending per sh	8.50
22.51	23.90	25.50	26.00	28.09	29.46	29.44	31.00	32.14	34.57	34.48	35.15	34.16	32.69	33.86	34.98	36.25	37.40	Book Value per sh ^C	41.50
87.52	84.83	84.83	84.83	84.83	84.83	91.26	91.29	91.79	99.08	99.96	100.49	100.89	101.43	108.77	109.25	110.00	111.00	Common Shs Outst'g ^D	118.50
11.8	11.8	15.2	11.9	11.3	12.0	14.4	14.0	15.8	19.2	13.7	14.9	16.1	13.7	12.6	14.6	<i> Bold figures are Value Line estimates </i>		Avg Ann'l P/E Ratio	13.5
.74	.68	.79	.68	.73	.61	.79	.80	.83	1.02	.74	.79	.97	.91	.80	.92			Relative P/E Ratio	.90
3.5%	3.5%	2.8%	3.5%	3.8%	3.5%	4.5%	4.9%	4.5%	4.5%	4.7%	4.8%	6.2%	6.8%	5.4%	4.8%			Avg Ann'l Div'd Yield	4.8%

	2009	2010	2011	BUSINESS: Pinnacle West Capital Corporation is a holding company for Arizona Public Service Company (APS), which supplies electricity to 1.1 million customers in most of Arizona, except about half of the Phoenix metro area, the Tucson metro area, and Mohave County in northwestern Arizona. Discontinued SunCor real estate subsidiary in '10. Electric revenue breakdown: residential, 47%; commercial, 39%; industrial, 5%; other, 9%. Generating sources: coal, 37%; nuclear, 27%; gas, 17%; purchased, 19%. Fuel costs: 31% of revenues. Has 6,700 employees. '11 reported deprec. rate: 3.0%. Chairman, President & CEO: Donald E. Brandt, Inc.: Arizona. Address: 400 North Fifth Street, P.O. Box 53999, Phoenix, Arizona 85072-3999. Tel.: 602-250-1000. Internet: www.pinnaclewest.com
% Change Retail Sales (KWH)	-2.2	-1.6	+1.8	
Avg. Indust. Use (MWH)	619	619	632	
Avg. Indust. Revs. per KW (\$)	8.11	7.83	7.78	
Capacity at Peak (MW)	8635	8682	8577	
Peak Load, Summer (MW)	7218	6396	7087	
Annual Load Factor (%)	49.3	50.0	50.0	
% Change Customers (yr-end)	+5	+4	+8	

Calendar	QUARTERLY REVENUES (\$ mill.)				Full Year
	Mar.31	Jun.30	Sep.30	Dec.31	
2009	625.9	836.0	1142.2	693.0	3297.1
2010	620.3	820.6	1139.1	683.6	3263.6
2011	648.9	799.8	1124.8	667.9	3241.4
2012	620.6	878.6	1200	700.8	3400
2013	650	875	1300	725	3550

Calendar	QUARTERLY DIVIDENDS PAID				Full Year
	Mar.31	Jun.30	Sep.30	Dec.31	
2008	.525	.525	.525	.525	2.10
2009	.525	.525	.525	.525	2.10
2010	.525	.525	.525	.525	2.10
2011	.525	.525	.525	.525	2.10
2012	.525	.525	.525	.545	

<p>(A) Diluted eps. Excl. nonrec. losses: '02, 77¢; '09, \$1.45; excl. gains (losses) from disc. ops.: '00, 22¢; '05, 36¢; '06, 10¢; '08, 28¢; '09, 13¢; '10, 18¢; '11, 10¢; '12, 1¢. '10 EPS</p>	<p>don't add due to change in shares, '11 due to rounding. Next earnings report due early Feb. (B) Div'ds historically paid in early Mar., June, Sept. and Dec. = Div'd reinvestment plan avail.</p>	<p>(C) Incl. deferred charges. In '11: \$14.32/sh. (D) In mill. (E) Rate base: Fair value. Rate allowed on com. eq. in '12: 10%; earned on avg. com. eq., '11: 8.6%. Regulatory Climate: Avg.</p>	<p>Company's Financial Strength B++ Stock's Price Stability 100 Stock's Growth Persistence 45 Earnings Predictability 65</p>
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<p>To subscribe call 1-800-833-0046.</p>			

PNM RESOURCES				NYSE-PNM		RECENT PRICE	21.76	P/E RATIO	16.4	(Trailing: 16.4 Median: 16.0)	RELATIVE P/E RATIO	1.08	DIV'D YLD	2.7%	VALUE LINE				
TIMELINESS	3	Lowered 8/31/12	High: 25.2	20.5	19.6	26.1	30.5	32.1	34.3	21.7	13.1	14.0	19.2	22.2		Target Price	Range		
SAFETY	3	Lowered 5/9/08	Low: 15.3	11.5	12.6	18.7	23.8	22.5	21.0	7.6	5.9	10.8	12.8	17.3		2015	2016	2017	
TECHNICAL	2	Raised 10/26/12	LEGENDS 1.30 x Dividends p sh divided by Interest Rate Relative Price Strength 3-for-2 split 6/04 Options: Yes Shaded areas indicate recessions														40		
BETA	.95	(1.00 = Market)	2015-17 PROJECTIONS														32		
			Price	Gain	Ann'l Total													24	
			High	30	(+40%)	11%													16
			Low	20	(-10%)	2%													12
			Insider Decisions														10		
			D	J	F	M	A	M	J	J	A						8		
			to Buy	0	0	0	0	0	0	0	0						6		
			Options	0	0	0	3	0	1	0	0						4		
			to Sell	0	0	0	4	0	1	0	0								
			Institutional Decisions																
			4Q2011	1Q2012	2Q2012														
			to Buy	63	84	76													
			to Sell	113	86	91													
			Hld's(000)	69828	69113	69724													
			Percent	24															
			shares	16															
			traded	8															
			% TOT. RETURN 9/12																
			THIS STOCK																
			VL ARITH' INDEX																
			1 yr. 31.7 28.2																
			3 yr. 100.6 42.3																
			5 yr. 11.3 29.3																
			© VALUE LINE PUBL. LLC 15-17																
1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Revenues per sh	22.35
14.10	18.12	17.43	18.96	27.46	40.09	19.92	24.11	26.54	30.19	32.25	24.92	22.65	19.01	19.31	21.35	16.65	17.20	"Cash Flow" per sh	3.80
2.61	2.58	3.04	2.82	3.16	4.31	2.83	3.05	3.14	3.56	3.57	2.54	1.76	2.32	2.67	3.18	3.20	3.30	Earnings per sh A	2.05
1.15	1.25	1.50	1.29	1.55	2.61	1.07	1.15	1.43	1.59	1.72	.76	.11	.58	.87	1.08	1.30	1.40	Div'd Decl'd per sh B	1.00
.24	.42	.51	.53	.53	.53	.57	.61	.63	.79	.86	.91	.61	.50	.50	.50	.58	.70	Cap'l Spending per sh	2.60
1.42	2.05	2.06	1.56	2.50	4.51	4.09	2.78	2.25	3.07	4.04	5.94	3.99	3.32	3.25	4.10	3.60	3.15	Book Value per sh C	22.40
12.04	12.84	13.75	14.74	15.76	17.25	16.60	17.84	18.19	18.70	22.09	22.03	18.89	18.90	17.60	19.62	20.15	20.90	Common Shs Outst'g D	85.00
62.66	62.66	62.66	61.05	58.68	58.68	60.39	60.46	68.79	76.65	76.81	86.53	86.67	86.67	79.65	80.00	80.00	80.00	Avg Ann'l P/E Ratio	12.0
11.0	10.0	9.8	9.5	8.5	7.3	15.1	14.7	15.0	17.1	15.6	NMF	NMF	18.1	14.0	14.5	14.5	14.5	Relative P/E Ratio	.80
.69	.58	.51	.54	.55	.37	.82	.84	.79	.91	.84	NMF	NMF	1.21	.89	.91	.91	.91	Avg Ann'l Div'd Yield	4.1%
1.9%	3.3%	3.5%	4.4%	4.1%	2.8%	3.5%	3.6%	2.9%	2.9%	3.2%	3.4%	4.9%	4.8%	4.1%	3.2%	3.2%	3.2%		
			CAPITAL STRUCTURE as of 6/30/12																
			Total Debt \$1881.3 mill. Due in 5 Yrs \$236.8 mill.																
			LT Debt \$1672.0 mill. LT Interest \$100 mill.																
			(LT interest earned: 2.8x)																
			Pension Assets-12/11 \$427.4 mill.																
			Oblig. \$588.9 mill.																
			Pfd Stock \$11.5 mill. Pfd Div'd \$.5 mill.																
			115,293 shs. 4.58% \$100 par w/o mandatory																
			redemption. Sinking fund began 2/1/84.																
			Common Stock 79,653,624 shs.																
			As of 7/27/12																
			MARKET CAP: \$1.7 billion (Mid Cap)																
			ELECTRIC OPERATING STATISTICS																
			2009 2010 2011																
			% Change Retail Sales (KWH)																
			Avg. Indust. Use (MWH)																
			Avg. Indust. Revs. per KWH (\$)																
			Capacity at Peak (MW)																
			Peak Load, Summer (MW)																
			Annual Load Factor (%)																
			% Change Customers (yr-end)																
			Fixed Charge Cov. (%)																
			ANNUAL RATES																
			Past 10 Yrs. Past 5 Yrs. Est'd '09-'11																
			of change (per sh)																
			Revenues																
			"Cash Flow"																
			Earnings																
			Dividends																
			Book Value																
			QUARTERLY REVENUES (\$ mill.)																
			Cal- Mar.31 Jun.30 Sep.30 Dec.31 Full Year																
			2009 385.9 401.1 477.7 383.0 1647.7																
			2010 383.5 405.8 503.7 380.5 1673.5																
			2011 387.7 415.5 549.5 347.9 1700.6																
			2012 305.4 323.9 400 300.7 1330																
			2013 310 335 425 305 1375																
			EARNINGS PER SHARE ^																
			Cal- Mar.31 Jun.30 Sep.30 Dec.31 Full Year																
			2009 .15 .01 .60 d.18 .58																
			2010 .06 .21 .63 d.03 .87																
			2011 .04 .20 .61 .22 1.08																
			2012 .17 .33 .60 .20 1.30																
			2013 .20 .35 .65 .20 1.40																
			QUARTERLY DIVIDENDS PAID ^																
			Cal- Mar.31 Jun.30 Sep.30 Dec.31 Full Year																
			2008 .23 .23 .125 .125 .71																
			2009 .125 .125 .125 .125 .50																
			2010 .125 .125 .125 .125 .50																
			2011 .125 .125 .125 .125 .50																
			2012 .145 .145 .145 .145 .50																

BUSINESS: PNM Resources is an investor-owned holding company of energy and energy related businesses. Primary subsidiaries include Public Service Company of New Mexico (PNM) and Texas-New Mexico Power Company (TNMP) which engage in the generation, transmission, and distribution of electricity in New Mexico and Texas. Sold First Choice Energy (9/11) and gas utility operations (1/09). Electric rev. breakdown '11: residential, 38%; commercial, 36%; industrial, 8%; other, 18%. Fuels: coal, 62%; nuclear, 30%; gas/oil, 8%. Fuel costs: 54% of revs. '11 dep. rate: 3.0%. Has 1,951 employees. Chrmn., Pres. & CEO: Patricia K. Collawn. Inc.: NM. Addr.: Alvarado Square, Albuquerque, NM. 87158. Tel.: 505-241-2700. Internet: www.pnmresources.com.

PNM Resources posted solid results during the second quarter. Ongoing earnings increased both sequentially, as well as compared to the year-earlier figure, to \$0.33 a share. PNM continued to benefit from higher retail rates. Warmer temperatures in June and lower outage costs helped, as well. Going forward, we expect this rate relief to positively influence the bottom line for the remainder of the year. Thus, we have increased our estimate for 2012 by a nickel, to \$1.30 a share. (Note: Earnings were scheduled to be released as we rolled the presses on this Issue.)

The electric utility remains active on the regulatory front. The company is waiting for the Federal Energy Regulatory Commission's (FERC) final approval regarding its transmission case (filed July 3rd). For this black-box settlement, an increased revenue number has been approved, but the FERC has yet to specify a return-on-equity figure. Indeed, the timing of the settlement has not been announced. As a result, we have boosted our top-line projections for 2012 and 2013, to \$1.33 billion and \$1.38 billion, respectively. What's

more, the company has taken numerous steps to finalize its renewable energy rider, 2013 renewable energy plan, and FERC generation case.

The Environmental Protection Agency (EPA) extended its 90-day stay. The EPA granted PNM an additional 45 days to propose its alternative to selective catalytic reduction (SCR) technology, which is expected to cost more than \$750 million to install. This plan involves converting two coal-fired plants at its San Juan Generating Station (SJGS) to natural gas or other noncoal generation by 2017. The remaining two units would have selective noncatalytic reduction technology installed; a less expensive alternative. That said, this extension will expire on November 29th, and PNM is still expected to remain on track to meet the 2016 deadline.

This stock is an unattractive selection for income-oriented investors. The company's 2.7% dividend yield is well below the utility industry average of 4.1%. Additionally, the issue dropped a notch in Timeliness, to 3 (Average).

Michelle Jensen November 2, 2012

(A) EPS diluted. Excl. nonrecurr. gains (losses): '97, '98, net (16%); '99, '00, 14%; '01, (10%); '03, 45%; '05, (56%); '07, 14%; '08, (3.77%); '10, (1.36%). Egs. may not sum due to rounding. Next egs. report due mid-Feb. (B) Div'ds hist. paid in mid Feb., May, Aug., Nov. Div'd reinvest. plan avail. † Shareholder invest. plan avail. (C) Incl. intang. '11: \$3.21/sh. (D) In mill., adjust. for split. (E) Rate base: net orig. cost. ROE allowed in '08: 10.1%; earned on avg. com. eq., '11: 6.1%. Regulatory Climate: Avg.

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Company's Financial Strength B
Stock's Price Stability 65
Price Growth Persistence 25
Earnings Predictability 15

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RECENT PRICE	42.95	P/E RATIO	15.5 (Trailing: 16.9 Median: 15.0)	RELATIVE P/E RATIO	1.07	DIV'D YLD	4.7%	VALUE LINE
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1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	© VALUE LINE PUB. LLC	15-17
15.30	18.19	16.34	17.40	14.78	14.54	14.73	15.31	16.05	18.28	19.24	20.12	22.04	19.21	20.70	20.41	19.10	19.55	Revenues per sh	21.75
3.64	3.86	4.26	4.17	3.89	3.55	3.46	3.53	3.65	4.03	4.01	4.22	4.43	4.43	4.51	4.91	5.15	5.45	"Cash Flow" per sh	6.25
1.68	1.58	1.73	1.83	2.01	1.61	1.85	1.97	2.06	2.13	2.10	2.28	2.25	2.32	2.36	2.55	2.65	2.80	Earnings per sh ^A	3.25
1.26	1.30	1.34	1.34	1.34	1.34	1.36	1.39	1.42	1.48	1.54	1.60	1.66	1.73	1.80	1.87	1.94	2.02	Div'd Decl'd per sh ^{B + †}	2.25
1.82	2.68	2.87	3.85	3.27	3.75	3.79	2.72	2.85	3.20	4.01	4.65	5.10	5.70	4.85	5.23	6.25	5.65	Cap'l Spending per sh	6.75
13.61	13.91	14.04	13.82	15.69	11.43	12.16	13.13	13.86	14.42	15.24	16.23	17.08	18.15	19.21	20.32	20.95	21.70	Book Value per sh ^C	25.75
677.04	693.42	697.75	665.80	681.16	698.34	716.40	734.83	741.50	741.45	746.27	763.10	777.19	819.65	843.34	865.13	868.00	870.00	Common Shs Outs'tg ^D	915.00
13.8	14.0	15.7	14.3	13.2	14.6	14.8	14.8	14.7	15.9	16.2	16.0	16.1	13.5	14.9	15.8	<i>Bold figures are Value Line estimates</i>		Avg Ann'l P/E Ratio	14.0
.86	.81	.82	.82	.86	.75	.80	.84	.78	.85	.87	.85	.97	.90	.95	1.00			Relative P/E Ratio	.95
5.5%	5.9%	4.9%	5.1%	5.0%	5.7%	5.0%	4.7%	4.7%	4.4%	4.5%	4.4%	4.6%	5.5%	5.1%	4.6%			Avg Ann'l Div'd Yield	5.0%

	2009	2010	2011	
% Change Retail Sales (KWH)	-4.8	+7.6	-2.7	BUSINESS: The Southern Company, through its subsidiaries, supplies electricity to 4.4 million customers in about 120,000 square miles of Georgia, Alabama, Florida, and Mississippi. Also has competitive generation business. Electric revenue breakdown: residential, 35%; commercial, 30%; industrial, 19%; wholesale, 11%; other, 5%. Retail revenues by state: Georgia, 51%; Alabama, 33%; Florida, 9%; Mississippi, 7%. Generating sources: coal, 49%; oil & gas, 28%; nuclear, 15%; hydro, 2%; purchased, 6%. Fuel costs: 39% of revenues. '11 reported deprec. rate (utility): 3.2%. Has 26,400 employees. Chairman, President and CEO: Thomas A. Fanning, Inc. Delaware. Address: 30 Ivan Allen Jr. Blvd., N.W., Atlanta, Georgia 30308. Tel. 404-506-5000. Internet: www.southerncompany.com .
Avg. Indust. Use (MWH)	3095	3332	3438	
Avg. Indust. Revs. per KWH (\$)	6.04	6.20	6.37	
Capacity at Yearend (MW)	42932	42963	43555	
Peak Load, Summer (MW)	34471	36321	36956	
Annual Load Factor (%)	60.6	62.2	59.0	
% Change Customers (yr-end)	-	+3	-1	

Calendar	QUARTERLY REVENUES (mill.)				Full Year
	Mar.31	Jun.30	Sep.30	Dec.31	
2009	3666	3885	4682	3510	15743
2010	4157	4208	5320	3771	17456
2011	4012	4521	5428	3696	17657
2012	3604	4181	5049	3756	16600
2013	3800	4200	5200	3800	17000

Calendar	QUARTERLY DIVIDENDS PAID ^B = [†]				Full Year
	Mar.31	Jun.30	Sep.30	Dec.31	
2008	.4025	.42	.42	.42	1.66
2009	.42	.4375	.4375	.4375	1.73
2010	.4375	.455	.455	.455	1.80
2011	.455	.4725	.4725	.4725	1.87
2012	.4725	.49	.49		

<p>(A) Diluted earnings. Excl. nonrecurring gain (loss): '03, '06; '09, (25¢). '10 EPS don't add due to change in shares. Net earnings report due late Jan. (B) Div'ds historically paid in ear-</p>	<p>ly Mar., June, Sept., and Dec. ■ Div'd reinvestment plan avail. † Shareholder investment plan avail. (C) Incl. deferred charges. In '11: \$6.27/sh. (D) In mill. (E) Rate base: AL, MS,</p>	<p>fair value; FL, GA, orig. cost. Allowed return on com. eq. (blended): 12.5%. Earned on avg. com. eq. '11: 13.0%. Regulatory Climate: GA, AL Above Average; MS, FL Average.</p>	<p>Company's Financial Strength Stock's Price Stability Price Growth Persistence Earnings Predictability</p>	<p>A 100 60 100</p>
<p>© 2012, Value Line Publishing LLC. All rights reserved. Factual material is obtained from sources believed to be reliable and is provided without warranties of any kind. The PUBLISHER is NOT RESPONSIBLE FOR ANY ERRORS OR OMISSIONS HEREIN. This publication is strictly for subscriber's own, non-commercial, internal use. No part of it may be reproduced, resold, stored or transmitted in any printed, electronic or other form, or used for generating or marketing any printed or electronic publication, service or product.</p>			<p>To subscribe call 1-800-833-0046.</p>	

ATTACHMENT B

AMERICAN ELEC PWR INC (NYSE)
ZACKS RANK: 3 - HOLD

AEP 41.29 ▼ -0.23 (-0.55%) Vol. 1,451,965 14:35 ET

American Electric Power is a public utility holding company which owns, directly or indirectly, all of the outstanding common stock of its domestic electric utility subsidiaries and varying percentages of other subsidiaries. Substantially all of the operating revenues of AEP and its subsidiaries are derived from the furnishing of electric service. The Company's operations are divided into three business segments: Wholesale, Energy Delivery and Other.


General Information

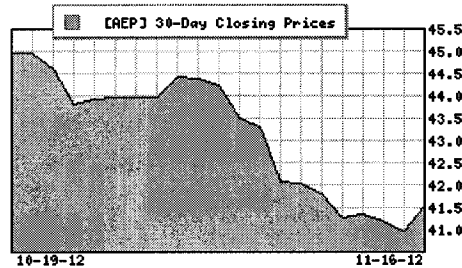
AMER ELEC PWR
 1 RIVERSIDE PLAZA
 COLUMBUS, OH 43215
 Phone: 614-716-1000
 Fax: 614-716-1823
 Web: <http://www.aep.com>
 Email: klkozero@aep.com

Industry: UTIL-ELEC PWR
 Sector: Utilities

Fiscal Year End: December
 Last Completed Quarter: 09/30/12
 Next EPS Date: 01/25/2013

Price and Volume Information

Zacks Rank 
 Yesterday's Close: 41.52
 52 Week High: 45.41
 52 Week Low: 36.97
 Beta: 0.47
 20 Day Moving Average: 2,736,342.00
 Target Price Consensus: 46


% Price Change

4 Week: -7.69
 12 Week: -2.99
 YTD: 0.51

% Price Change Relative to S&P 500

4 Week: -2.72
 12 Week: 0.67
 YTD: -7.05

Share Information

Shares Outstanding (millions): 484.90
 Market Capitalization (millions): 20,133.17
 Short Ratio: 3.25
 Last Split Date: N/A

Dividend Information

Dividend Yield: 4.53%
 Annual Dividend: \$1.88
 Payout Ratio: 0.63
 Change in Payout Ratio: 0.07
 Last Dividend Payout / Amount: 11/07/2012 / \$0.47

EPS Information

Current Quarter EPS Consensus Estimate: 0.45
 Current Year EPS Consensus Estimate: 3.05
 Estimated Long-Term EPS Growth Rate: 3.50
 Next EPS Report Date: 01/25/2013

Consensus Recommendations

Current (1=Strong Buy, 5=Strong Sell): 2.03
 30 Days Ago: 2.03
 60 Days Ago: 2.03
 90 Days Ago: 2.03

Fundamental Ratios
P/E

Current FY Estimate: 13.63
 Trailing 12 Months: 13.89
 PEG Ratio: 3.91

EPS Growth

vs. Previous Year: -12.82%
 vs. Previous Quarter: 32.47%

Sales Growth

vs. Previous Year: -3.35%
 vs. Previous Quarter: 17.04%

Price Ratios

Price/Book: 1.32 09/30/12

ROE
ROA

9.69 09/30/12 2.73

Price/Cash Flow	6.08	06/30/12	10.27	06/30/12	2.90
Price / Sales	1.36	03/31/12	10.33	03/31/12	2.90
Current Ratio		Quick Ratio		Operating Margin	
09/30/12	0.68	09/30/12	0.47	09/30/12	9.81
06/30/12	0.70	06/30/12	0.47	06/30/12	10.18
03/31/12	0.66	03/31/12	0.44	03/31/12	10.03
Net Margin		Pre-Tax Margin		Book Value	
09/30/12	13.96	09/30/12	13.96	09/30/12	31.57
06/30/12	15.63	06/30/12	15.63	06/30/12	30.99
03/31/12	15.43	03/31/12	15.43	03/31/12	30.70
Inventory Turnover		Debt-to-Equity		Debt to Capital	
09/30/12	6.61	09/30/12	0.98	09/30/12	49.42
06/30/12	7.09	06/30/12	1.02	06/30/12	50.51
03/31/12	7.45	03/31/12	1.03	03/31/12	50.80

CLECO CORP NEW (NYSE)
ZACKS RANK: 2 - BUY
CNL 39.41 ▲ 0.15 (0.38%) Vol. 262,984 14:35 ET

Cleco Corp. is an energy services company based in central Louisiana. Their two primary businesses are Cleco Power LLC, a regulated electric utility business, and Cleco Midstream Resources LLC, a wholesale energy business. They use a mixture of western coal, petroleum coke (petcoke), lignite, oil, and natural gas to serve their customers. This diverse fuel mix helps Cleco deliver reliable, low-cost power to its customers.

General Information

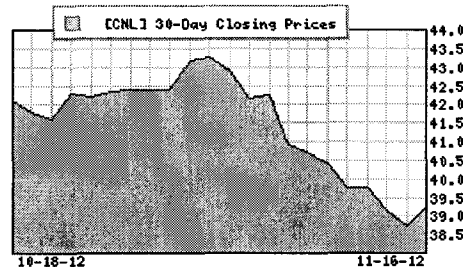
CLECO CORP
 2030 DONAHUE FERRY ROAD
 PINEVILLE, LA 71361-5000
 Phone: 318-484-7400
 Fax: 318-484-7465
 Web: <http://www.cleco.com>
 Email: None

Industry: UTIL-ELEC PWR
 Sector: Utilities

Fiscal Year End: December
 Last Completed Quarter: 09/30/12
 Next EPS Date: 02/20/2013

Price and Volume Information

Zacks Rank: 
 Yesterday's Close: 39.26
 52 Week High: 45.30
 52 Week Low: 33.80
 Beta: 0.46
 20 Day Moving Average: 279,407.66
 Target Price Consensus: 44


% Price Change

4 Week: -6.05
 12 Week: -4.85
 YTD: 3.04

% Price Change Relative to S&P 500

4 Week: -0.99
 12 Week: -1.26
 YTD: -4.71

Share Information

Shares Outstanding (millions): 60.72
 Market Capitalization (millions): 2,383.67
 Short Ratio: 4.10
 Last Split Date: 05/22/2001

Dividend Information

Dividend Yield: 3.44%
 Annual Dividend: \$1.35
 Payout Ratio: 0.53
 Change in Payout Ratio: 0.01
 Last Dividend Payout / Amount: 11/05/2012 / \$0.34

EPS Information

Current Quarter EPS Consensus Estimate: 0.34
 Current Year EPS Consensus Estimate: 2.43
 Estimated Long-Term EPS Growth Rate: 3.00
 Next EPS Report Date: 02/20/2013

Consensus Recommendations

Current (1=Strong Buy, 5=Strong Sell): 2.25
 30 Days Ago: 2.75
 60 Days Ago: 2.75
 90 Days Ago: 2.75

Fundamental Ratios
P/E

Current FY Estimate: 16.16
 Trailing 12 Months: 15.34
 PEG Ratio: 5.39

EPS Growth

vs. Previous Year: -3.67%
 vs. Previous Quarter: 64.06%

Sales Growth

vs. Previous Year: -15.42%
 vs. Previous Quarter: 23.84%

Price Ratios

Price/Book

ROE

1.59 09/30/12

ROA

10.63 09/30/12

3.83

Price/Cash Flow	7.56	06/30/12	10.99	06/30/12	3.90
Price / Sales	2.39	03/31/12	10.65	03/31/12	3.72
Current Ratio		Quick Ratio		Operating Margin	
09/30/12	1.48	09/30/12	1.12	09/30/12	15.47
06/30/12	1.22	06/30/12	0.88	06/30/12	14.92
03/31/12	1.59	03/31/12	1.18	03/31/12	13.85
Net Margin		Pre-Tax Margin		Book Value	
09/30/12	25.49	09/30/12	25.49	09/30/12	24.74
06/30/12	24.80	06/30/12	24.80	06/30/12	23.90
03/31/12	27.70	03/31/12	27.70	03/31/12	23.63
Inventory Turnover		Debt-to-Equity		Debt to Capital	
09/30/12	4.15	09/30/12	0.82	09/30/12	45.17
06/30/12	4.83	06/30/12	0.85	06/30/12	46.08
03/31/12	5.33	03/31/12	0.92	03/31/12	47.87

EMPIRE DIST ELEC CO (NYSE)
ZACKS RANK: 2 - BUY

EDE 20.19 ▼ -0.08 (-0.39%) Vol. 93,300 14:36 ET

The Empire District Electric Company is an operating public utility engaged in the generation, purchase, transmission, distribution and sale of electricity in parts of Missouri, Kansas, Oklahoma and Arkansas. The Company also provides water service to several towns in Missouri.


General Information

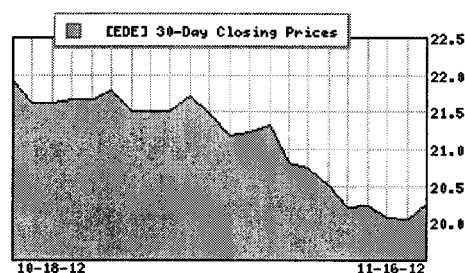
EMPIRE DISTRICT
 602 JOPLIN ST
 JOPLIN, MO 64802
 Phone: 4176255100
 Fax: 417-625-5146
 Web: <http://www.empiredistrict.com>
 Email: jwatson@empiredistrict.com

Industry: UTIL-ELEC PWR
 Sector: Utilities

Fiscal Year End: December
 Last Completed Quarter: 09/30/12
 Next EPS Date: 02/07/2013

Price and Volume Information

Zacks Rank 
 Yesterday's Close: 20.27
 52 Week High: 22.04
 52 Week Low: 19.51
 Beta: 0.56
 20 Day Moving Average: 137,000.25
 Target Price Consensus: 21


% Price Change

4 Week: -6.29
 12 Week: -4.57
 YTD: -3.89

% Price Change Relative to S&P 500

4 Week: -1.24
 12 Week: -0.97
 YTD: -11.12

Share Information

Shares Outstanding (millions): 42.33
 Market Capitalization (millions): 858.01
 Short Ratio: 9.12
 Last Split Date: 01/30/1992

Dividend Information

Dividend Yield: 4.93%
 Annual Dividend: \$1.00
 Payout Ratio: 0.78
 Change in Payout Ratio: -0.21
 Last Dividend Payout / Amount: 08/29/2012 / \$0.25

EPS Information

Current Quarter EPS Consensus Estimate: N/A
 Current Year EPS Consensus Estimate: 1.20
 Estimated Long-Term EPS Growth Rate: -
 Next EPS Report Date: 02/07/2013

Consensus Recommendations

Current (1=Strong Buy, 5=Strong Sell): 3.00
 30 Days Ago: 3.00
 60 Days Ago: 3.00
 90 Days Ago: 3.00

Fundamental Ratios

P/E	EPS Growth	Sales Growth
Current FY Estimate: 16.89	vs. Previous Year: 0.00%	vs. Previous Year: -3.09%
Trailing 12 Months: 15.71	vs. Previous Quarter: 140.00%	vs. Previous Quarter: 20.94%
PEG Ratio: -		

Price Ratios	ROE	ROA
Price/Book: 1.20	09/30/12: 7.80	09/30/12: 2.68

Price/Cash Flow	6.32	06/30/12	7.84	06/30/12	2.70
Price / Sales	1.53	03/31/12	7.73	03/31/12	2.66
Current Ratio		Quick Ratio		Operating Margin	
09/30/12	0.81	09/30/12	0.50	09/30/12	9.76
06/30/12	0.81	06/30/12	0.51	06/30/12	9.61
03/31/12	0.88	03/31/12	0.53	03/31/12	9.38
Net Margin		Pre-Tax Margin		Book Value	
09/30/12	15.93	09/30/12	15.93	09/30/12	16.93
06/30/12	15.71	06/30/12	15.71	06/30/12	16.59
03/31/12	15.49	03/31/12	15.49	03/31/12	16.62
Inventory Turnover		Debt-to-Equity		Debt to Capital	
09/30/12	5.51	09/30/12	0.83	09/30/12	45.31
06/30/12	5.67	06/30/12	0.85	06/30/12	45.92
03/31/12	5.89	03/31/12	0.87	03/31/12	46.45

ENTERGY CORP NEW (NYSE)
ZACKS RANK: 3 - HOLD

ETR 62.45 ▼ -0.41 (-0.65%) **Vol.** 665,063 **14:37 ET**

Entergy Corporation engages principally in the following businesses: domestic utility operations, power marketing and trading, global power development, and domestic non-utility nuclear operations. They are a major integrated energy company engaged in power production, distribution operations, and related diversified services. They are also a leading provider of wholesale energy marketing and trading services, as well as an operator of natural gas pipeline and storage facilities.


General Information

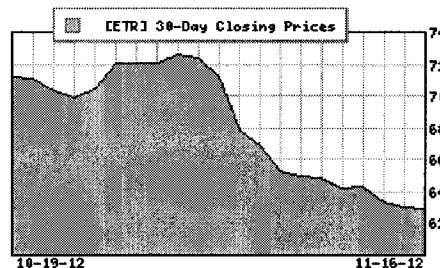
ENTERGY CORP
 639 LOYOLA AVE
 NEW ORLEANS, LA 70161
 Phone: 5045764000
 Fax: 504-576-4428
 Web: <http://www.entergy.com>
 Email: pwater1@entergy.com

Industry UTIL-ELEC PWR
Sector: Utilities

Fiscal Year End December
Last Completed Quarter 09/30/12
Next EPS Date 02/05/2013

Price and Volume Information

Zacks Rank 
Yesterday's Close 62.86
52 Week High 74.50
52 Week Low 62.32
Beta 0.49
20 Day Moving Average 1,273,984.88
Target Price Consensus 70.06


% Price Change

4 Week -11.75
 12 Week -8.54
 YTD -13.95

% Price Change Relative to S&P 500

4 Week -6.99
 12 Week -5.09
 YTD -20.42

Share Information

Shares Outstanding (millions) 177.32
Market Capitalization (millions) 11,146.27
Short Ratio 4.97
Last Split Date N/A

Dividend Information

Dividend Yield 5.28%
Annual Dividend \$3.32
Payout Ratio 0.61
Change in Payout Ratio 0.14
Last Dividend Payout / Amount 11/06/2012 / \$0.83

EPS Information

Current Quarter EPS Consensus Estimate 0.95
Current Year EPS Consensus Estimate 5.49
Estimated Long-Term EPS Growth Rate -1.50
Next EPS Report Date 02/05/2013

Consensus Recommendations

Current (1=Strong Buy, 5=Strong Sell) 2.87
30 Days Ago 2.87
60 Days Ago 2.87
90 Days Ago 2.87

Fundamental Ratios

P/E	EPS Growth	Sales Growth
Current FY Estimate: 11.44	vs. Previous Year -44.76%	vs. Previous Year -12.72%
Trailing 12 Months: 11.56	vs. Previous Quarter -7.58%	vs. Previous Quarter: 17.67%
PEG Ratio -7.38		

Price Ratios
ROE
ROA

Price/Book	1.21	09/30/12	10.78	09/30/12	2.36
Price/Cash Flow	3.54	06/30/12	14.15	06/30/12	3.14
Price / Sales	1.08	03/31/12	13.66	03/31/12	3.03
Current Ratio		Quick Ratio		Operating Margin	
09/30/12	0.97	09/30/12	0.68	09/30/12	9.39
06/30/12	1.05	06/30/12	0.68	06/30/12	11.76
03/31/12	1.19	03/31/12	1.12	03/31/12	10.93
Net Margin		Pre-Tax Margin		Book Value	
09/30/12	8.95	09/30/12	8.95	09/30/12	51.83
06/30/12	8.02	06/30/12	8.02	06/30/12	50.97
03/31/12	9.83	03/31/12	9.83	03/31/12	50.27
Inventory Turnover		Debt-to-Equity		Debt to Capital	
09/30/12	7.45	09/30/12	1.28	09/30/12	55.93
06/30/12	7.96	06/30/12	1.33	06/30/12	57.20
03/31/12	8.28	03/31/12	1.36	03/31/12	57.44

GREAT PLAINS ENERGY INCOR (NYSE)
ZACKS RANK: 3 - HOLD
GXP 20.17 ▼-0.23 (-1.13%) Vol. 572,535 14:37 ET

Great Plains Energy Incorporated engages in the generation, transmission, distribution and sale of electricity to customers located in all or portions of numerous counties in western Missouri and eastern Kansas. Customers include residences, commercial firms, and industrials, municipalities and other electric utilities.


General Information

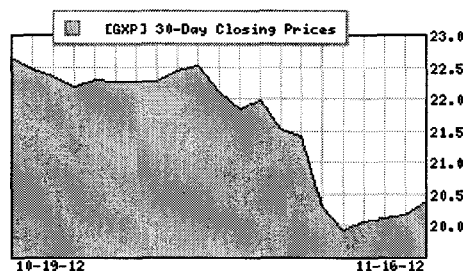
GREAT PLAINS EN
 1201 WALNUT PO BOX 418679
 KANSAS CITY, MO 64106-2124
 Phone: 816-556-2200
 Fax: 816-556-2446
 Web: <http://www.greatplainsenergy.com>
 Email: None

Industry: UTIL-ELEC PWR
 Sector: Utilities

Fiscal Year End: December
 Last Completed Quarter: 09/30/12
 Next EPS Date: 03/04/2013

Price and Volume Information

Zacks Rank 
 Yesterday's Close: 20.40
 52 Week High: 22.85
 52 Week Low: 19.45
 Beta: 0.69
 20 Day Moving Average: 801,906.38
 Target Price Consensus: 23.1


% Price Change

4 Week: -9.97
 12 Week: -4.85
 YTD: -6.34

% Price Change Relative to S&P 500

4 Week: -5.12
 12 Week: -1.26
 YTD: -13.38

Share Information

Shares Outstanding (millions): 153.43
 Market Capitalization (millions): 3,129.99
 Short Ratio: 2.35
 Last Split Date: 06/01/1992

Dividend Information

Dividend Yield: 4.17%
 Annual Dividend: \$0.85
 Payout Ratio: 0.65
 Change in Payout Ratio: -0.10
 Last Dividend Payout / Amount: 08/27/2012 / \$0.21

EPS Information

Current Quarter EPS Consensus Estimate: 0.03
 Current Year EPS Consensus Estimate: 1.31
 Estimated Long-Term EPS Growth Rate: 8.20
 Next EPS Report Date: 03/04/2013

Consensus Recommendations

Current (1=Strong Buy, 5=Strong Sell): 2.33
 30 Days Ago: 2.33
 60 Days Ago: 2.25
 90 Days Ago: 2.56

Fundamental Ratios

P/E		EPS Growth		Sales Growth	
Current FY Estimate:	15.61	vs. Previous Year	4.40%	vs. Previous Year	-3.55%
Trailing 12 Months:	15.69	vs. Previous Quarter	131.71%	vs. Previous Quarter:	23.62%
PEG Ratio	1.91				

Price Ratios		ROE		ROA	
Price/Book	0.93	09/30/12		6.30	09/30/12
					2.12

Price/Cash Flow	5.76	06/30/12	5.86	06/30/12	1.94
Price / Sales	1.35	03/31/12	5.54	03/31/12	1.80
Current Ratio		Quick Ratio		Operating Margin	
09/30/12	0.61	09/30/12	0.43	09/30/12	8.50
06/30/12	0.58	06/30/12	0.37	06/30/12	7.58
03/31/12	0.42	03/31/12	0.25	03/31/12	7.07
Net Margin		Pre-Tax Margin		Book Value	
09/30/12	12.80	09/30/12	12.80	09/30/12	21.93
06/30/12	11.49	06/30/12	11.49	06/30/12	23.82
03/31/12	10.53	03/31/12	10.53	03/31/12	21.49
Inventory Turnover		Debt-to-Equity		Debt to Capital	
09/30/12	2.61	09/30/12	0.82	09/30/12	44.80
06/30/12	2.84	06/30/12	0.93	06/30/12	47.83
03/31/12	2.96	03/31/12	1.03	03/31/12	50.47

HAWAIIAN ELECTRIC INDUS (NYSE)
ZACKS RANK: 3 - HOLD

HE **24.13** ▼-0.08 (-0.33%) Vol. 199,558 14:37 ET

Hawaiian Electric Industries, Inc. is a holding company with subsidiaries engaged in the electric utility, savings bank, freight transportation, real estate development and other businesses, primarily in the State of Hawaii, and in the pursuit of independent power projects in Asia and the Pacific.


General Information

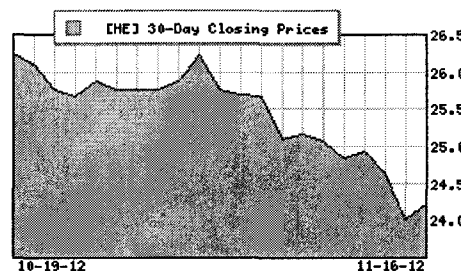
HAWAIIAN ELEC
 900 RICHARDS ST
 HONOLULU, HI 96813
 Phone: 8085435662
 Fax: 808-543-7602
 Web: <http://www.hei.com>
 Email: skimura@hei.com

Industry: UTIL-ELEC PWR
 Sector: Utilities

Fiscal Year End: December
 Last Completed Quarter: 09/30/12
 Next EPS Date: 02/06/2013

Price and Volume Information

Zacks Rank 
 Yesterday's Close: 24.21
 52 Week High: 29.24
 52 Week Low: 23.65
 Beta: 0.46
 20 Day Moving Average: 286,236.84
 Target Price Consensus: 26.5


% Price Change

4 Week: -7.77
 12 Week: -11.02
 YTD: -8.57

% Price Change Relative to S&P 500

4 Week: -2.80
 12 Week: -7.67
 YTD: -15.45

Share Information

Shares Outstanding (millions): 97.08
 Market Capitalization (millions): 2,350.35
 Short Ratio: 4.59
 Last Split Date: 06/14/2004

Dividend Information

Dividend Yield: 5.12%
 Annual Dividend: \$1.24
 Payout Ratio: 0.75
 Change in Payout Ratio: -0.19
 Last Dividend Payout / Amount: 11/15/2012 / \$0.31

EPS Information

Current Quarter EPS Consensus Estimate: 0.34
 Current Year EPS Consensus Estimate: 1.61
 Estimated Long-Term EPS Growth Rate: 7.00
 Next EPS Report Date: 02/06/2013

Consensus Recommendations

Current (1=Strong Buy, 5=Strong Sell): 3.60
 30 Days Ago: 3.60
 60 Days Ago: 3.60
 90 Days Ago: 3.60

Fundamental Ratios

P/E	EPS Growth	Sales Growth
Current FY Estimate: 15.06	vs. Previous Year: -2.00%	vs. Previous Year: -2.10%
Trailing 12 Months: 14.67	vs. Previous Quarter: 22.50%	vs. Previous Quarter: 1.57%
PEG Ratio: 2.14		

Price Ratios	ROE	ROA
Price/Book: 1.46	09/30/12: 10.24	09/30/12: 1.65

Price/Cash Flow	7.55	06/30/12	10.43	06/30/12	1.69
Price / Sales	0.69	03/31/12	9.78	03/31/12	1.59
Current Ratio		Quick Ratio		Operating Margin	
09/30/12	0.91	09/30/12	0.91	09/30/12	4.74
06/30/12	0.91	06/30/12	0.91	06/30/12	4.74
03/31/12	0.90	03/31/12	0.90	03/31/12	4.48
Net Margin		Pre-Tax Margin		Book Value	
09/30/12	7.35	09/30/12	7.35	09/30/12	16.55
06/30/12	7.39	06/30/12	7.39	06/30/12	16.31
03/31/12	6.91	03/31/12	6.91	03/31/12	16.15
Inventory Turnover		Debt-to-Equity		Debt to Capital	
09/30/12	-	09/30/12	0.89	09/30/12	47.67
06/30/12	-	06/30/12	0.91	06/30/12	48.16
03/31/12	-	03/31/12	0.83	03/31/12	45.87

IDACORP INC (NYSE)
ZACKS RANK: 2 - BUY

IDA **41.04** **▼-0.09** **(-0.22%)** **Vol. 69,758** **14:38 ET**

Idacorp Inc. is an electric public utility company. The company is engaged in the generation, purchase, transmission, distribution and sale of electric energy primarily in the areas including southern Idaho, eastern Oregon and northern Nevada. The company relies heavily on hydroelectric power for its generating needs and is one of the nation's few investor-owned utilities with a predominantly hydro base. The company's principal commercial and industrial customers include lodges, condominiums, and ski lifts and related facilities.

General Information

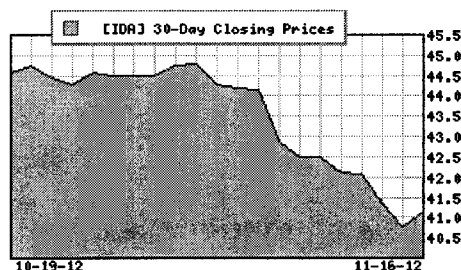
IDACORP INC
 1221 WEST IDAHO STREET
 BOISE, ID 83702-5627
 Phone: 2083882200
 Fax: 208-388-6916
 Web: <http://www.idacorpinc.com>
 Email: None

Industry: **UTIL-ELEC PWR**
 Sector: **Utilities**

Fiscal Year End: **December**
 Last Completed Quarter: **09/30/12**
 Next EPS Date: **02/20/2013**

Price and Volume Information

Zacks Rank: ****
 Yesterday's Close: **41.13**
 52 Week High: **45.67**
 52 Week Low: **38.17**
 Beta: **0.43**
 20 Day Moving Average: **201,276.45**
 Target Price Consensus: **48**


% Price Change

4 Week: **-7.70**
 12 Week: **-1.70**
 YTD: **-3.02**

% Price Change Relative to S&P 500

4 Week: **-2.72**
 12 Week: **2.01**
 YTD: **-10.31**

Share Information

Shares Outstanding (millions): **50.15**
 Market Capitalization (millions): **2,062.88**
 Short Ratio: **6.12**
 Last Split Date: **N/A**

Dividend Information

Dividend Yield: **3.70%**
 Annual Dividend: **\$1.52**
 Payout Ratio: **0.41**
 Change in Payout Ratio: **-0.07**
 Last Dividend Payout / Amount: **11/01/2012 / \$0.38**

EPS Information

Current Quarter EPS Consensus Estimate: **0.30**
 Current Year EPS Consensus Estimate: **3.34**
 Estimated Long-Term EPS Growth Rate: **4.00**
 Next EPS Report Date: **02/20/2013**

Consensus Recommendations

Current (1=Strong Buy, 5=Strong Sell): **1.60**
 30 Days Ago: **1.75**
 60 Days Ago: **1.33**
 90 Days Ago: **1.33**

Fundamental Ratios
P/E

Current FY Estimate: **12.33**
 Trailing 12 Months: **12.73**
 PEG Ratio: **3.08**

EPS Growth

vs. Previous Year: **-14.81%**
 vs. Previous Quarter: **159.15%**

Sales Growth

vs. Previous Year: **7.88%**
 vs. Previous Quarter: **31.14%**

Price Ratios
ROE
ROA

Price/Book	1.16	09/30/12	9.48	09/30/12	3.18
Price/Cash Flow	7.03	06/30/12	10.53	06/30/12	3.55
Price / Sales	1.95	03/31/12	9.87	03/31/12	3.33
Current Ratio		Quick Ratio		Operating Margin	
09/30/12	1.36	09/30/12	0.99	09/30/12	15.21
06/30/12	1.21	06/30/12	0.84	06/30/12	17.01
03/31/12	1.14	03/31/12	0.77	03/31/12	15.93
Net Margin		Pre-Tax Margin		Book Value	
09/30/12	16.63	09/30/12	16.63	09/30/12	35.38
06/30/12	13.72	06/30/12	13.72	06/30/12	33.86
03/31/12	11.17	03/31/12	11.17	03/31/12	33.53
Inventory Turnover		Debt-to-Equity		Debt to Capital	
09/30/12	6.42	09/30/12	0.87	09/30/12	46.41
06/30/12	6.57	06/30/12	0.91	06/30/12	47.53
03/31/12	6.87	03/31/12	0.89	03/31/12	47.03

NV ENERGY INC (NYSE)
ZACKS RANK: 2 - BUY

NVE 17.79 ▲ 0.01 (0.06%) Vol. 1,362,119 14:39 ET

Sierra Pacific Resources, the holding company for Sierra Pacific Power Company, provide electricity to more than 286,000 customers in the area of northern Nevada and northeastern California, including world-famous Reno and Lake Tahoe. The company also provide natural gas and water service to customers in the greater Reno metropolitan area. Other operating subsidiaries of the company include the Tuscarora Gas Pipeline Company, Lands of Sierra, Sierra Energy Company, eothree and Sierra Water Development Company.


General Information

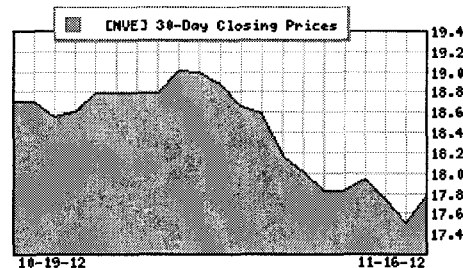
NV ENERGY INC
 6226 W SAHARA AVE
 LAS VEGAS, NV 89151
 Phone: 7023675000
 Fax: 775-834-3815
 Web: <http://www.nvenergy.com>
 Email: ir@navidea.com

Industry: UTIL-ELEC PWR
 Sector: Utilities

Fiscal Year End: December
 Last Completed Quarter: 09/30/12
 Next EPS Date: 02/19/2013

Price and Volume Information

Zacks Rank 
 Yesterday's Close: 17.78
 52 Week High: 19.20
 52 Week Low: 14.33
 Beta: 0.58
 20 Day Moving Average: 1,582,669.00
 Target Price Consensus: 19.42


% Price Change

4 Week: -4.92
 12 Week: -1.06
 YTD: 8.75

% Price Change Relative to S&P 500

4 Week: 0.21
 12 Week: 2.67
 YTD: 0.57

Share Information

Shares Outstanding (millions): 236.00
 Market Capitalization (millions): 4,196.08
 Short Ratio: 0.67
 Last Split Date: 07/29/1999

Dividend Information

Dividend Yield: 3.82%
 Annual Dividend: \$0.68
 Payout Ratio: 0.55
 Change in Payout Ratio: 0.04
 Last Dividend Payout / Amount: 08/30/2012 / \$0.17

EPS Information

Current Quarter EPS Consensus Estimate: 0.07
 Current Year EPS Consensus Estimate: 1.34
 Estimated Long-Term EPS Growth Rate: 15.10
 Next EPS Report Date: 02/19/2013

Consensus Recommendations

Current (1=Strong Buy, 5=Strong Sell): 2.50
 30 Days Ago: 2.50
 60 Days Ago: 2.50
 90 Days Ago: 2.50

Fundamental Ratios
P/E

Current FY Estimate: 13.26
 Trailing 12 Months: 14.45
 PEG Ratio: 0.88

EPS Growth

vs. Previous Year: 28.77%
 vs. Previous Quarter: 224.14%

Sales Growth

vs. Previous Year: 0.85%
 vs. Previous Quarter: 38.58%

Price Ratios
ROE
ROA

Price/Book	1.17	09/30/12	8.49	09/30/12	2.49
Price/Cash Flow	7.84	06/30/12	7.12	06/30/12	2.08
Price / Sales	1.40	03/31/12	5.50	03/31/12	1.60
Current Ratio		Quick Ratio		Operating Margin	
09/30/12	1.12	09/30/12	0.97	09/30/12	9.81
06/30/12	1.15	06/30/12	0.95	06/30/12	8.17
03/31/12	0.89	03/31/12	0.73	03/31/12	6.41
Net Margin		Pre-Tax Margin		Book Value	
09/30/12	14.50	09/30/12	14.50	09/30/12	15.23
06/30/12	11.93	06/30/12	11.93	06/30/12	14.48
03/31/12	9.20	03/31/12	9.20	03/31/12	14.35
Inventory Turnover		Debt-to-Equity		Debt to Capital	
09/30/12	10.46	09/30/12	1.33	09/30/12	57.00
06/30/12	10.96	06/30/12	1.50	06/30/12	60.03
03/31/12	11.61	03/31/12	1.49	03/31/12	59.78

PINNACLE WEST CAPITAL CORP (NYSE)
ZACKS RANK: 3 - HOLD

PNW 49.39 ▼-0.42 (-0.84%) Vol. 486,782 14:39 ET

Pinnacle West Capital is engaged, through its subsidiaries, in the generation, transmission, and distribution of electricity and selling energy, products and services; in real estate development; and in venture capital investment. Its primary subsidiary is Arizona Public Service Company. The company's other subsidiaries include SunCor, El Dorado, APS Energy Services and Pinnacle West Energy.


General Information

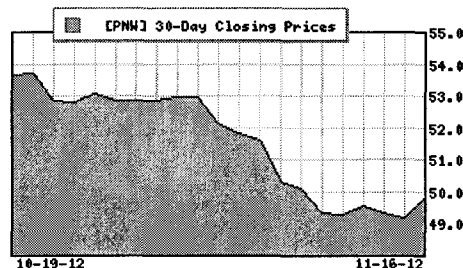
PINNACLE WEST
 400 NORTH FIFTH STREET MS8695
 PHOENIX, AZ 85004
 Phone: 6022501000
 Fax: 602-250-2430
 Web: -
 Email: rhickman@pinnaclewest.com

Industry: UTIL-ELEC PWR
 Sector: Utilities

Fiscal Year End: December
 Last Completed Quarter: 09/30/12
 Next EPS Date: 02/22/2013

Price and Volume Information

Zacks Rank 
 Yesterday's Close: 49.81
 52 Week High: 54.66
 52 Week Low: 44.19
 Beta: 0.51
 20 Day Moving Average: 610,297.13
 Target Price Consensus: 54


% Price Change

4 Week: -7.12
 12 Week: -3.69
 YTD: 3.38

% Price Change Relative to S&P 500

4 Week: -2.12
 12 Week: -0.06
 YTD: -4.39

Share Information

Shares Outstanding (millions): 109.54
 Market Capitalization (millions): 5,456.39
 Short Ratio: 2.58
 Last Split Date: N/A

Dividend Information

Dividend Yield: 4.38%
 Annual Dividend: \$2.18
 Payout Ratio: 0.62
 Change in Payout Ratio: -0.18
 Last Dividend Payout / Amount: 10/31/2012 / \$1.09

EPS Information

Current Quarter EPS Consensus Estimate: 0.15
 Current Year EPS Consensus Estimate: 3.43
 Estimated Long-Term EPS Growth Rate: 6.00
 Next EPS Report Date: 02/22/2013

Consensus Recommendations

Current (1=Strong Buy, 5=Strong Sell): 2.83
 30 Days Ago: 2.83
 60 Days Ago: 2.83
 90 Days Ago: 2.83

Fundamental Ratios
P/E

Current FY Estimate: 14.53
 Trailing 12 Months: 14.78
 PEG Ratio: 2.41

EPS Growth

vs. Previous Year: -1.34%
 vs. Previous Quarter: 97.32%

Sales Growth

vs. Previous Year: -1.37%
 vs. Previous Quarter: 26.28%

Price Ratios

Price/Book: 1.30 09/30/12

ROE
ROA

9.38 09/30/12 2.81

Price/Cash Flow	8.16	06/30/12	9.52	06/30/12	2.84
Price / Sales	1.67	03/31/12	8.67	03/31/12	2.59
Current Ratio		Quick Ratio		Operating Margin	
09/30/12	1.16	09/30/12	0.89	09/30/12	11.36
06/30/12	0.86	06/30/12	0.63	06/30/12	11.34
03/31/12	0.78	03/31/12	0.57	03/31/12	10.46
Net Margin		Pre-Tax Margin		Book Value	
09/30/12	19.23	09/30/12	19.23	09/30/12	38.21
06/30/12	18.68	06/30/12	18.68	06/30/12	35.62
03/31/12	17.16	03/31/12	17.16	03/31/12	35.34
Inventory Turnover		Debt-to-Equity		Debt to Capital	
09/30/12	7.78	09/30/12	0.80	09/30/12	44.37
06/30/12	8.06	06/30/12	0.86	06/30/12	46.37
03/31/12	8.18	03/31/12	0.87	03/31/12	46.39

PNM RESOURCES INC (NYSE)
ZACKS RANK: 2 - BUY

PNM 20.25 ▼ -0.05 (-0.25%) Vol. 156,205 14:40 ET

PNM Resources is an energy holding company based in Albuquerque, New Mexico. Its principal subsidiary is Public Service Company of New Mexico, which provides electric power and natural gas utility services to more than 1.3 million people in New Mexico. The company also sells power on the wholesale market in the Western U.S.

General Information

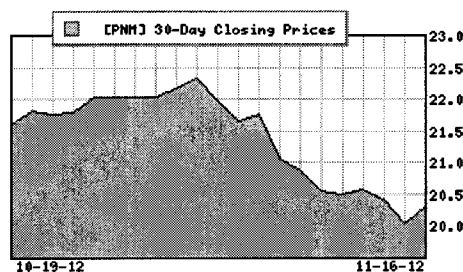
PNM RESOURCES
 ALVARADO SQUARE NEW MEXICO
 ALBUQUERQUE, NM 87158
 Phone: 505-241-2700
 Fax: 505-241-4311
 Web: <http://www.pnmresources.com>
 Email: None

Industry: UTIL-ELEC PWR
 Sector: Utilities

Fiscal Year End: December
 Last Completed Quarter: 09/30/12
 Next EPS Date: 03/06/2013

Price and Volume Information

Zacks Rank: 
 Yesterday's Close: 20.30
 52 Week High: 22.54
 52 Week Low: 16.99
 Beta: 0.89
 20 Day Moving Average: 367,562.34
 Target Price Consensus: 23.1



% Price Change		% Price Change Relative to S&P 500	
4 Week	-6.06	4 Week	-1.00
12 Week	-1.12	12 Week	2.61
YTD	11.35	YTD	2.98

Share Information

Shares Outstanding (millions): 79.65
 Market Capitalization (millions): 1,616.98
 Short Ratio: 5.00
 Last Split Date: 06/14/2004

Dividend Information

Dividend Yield: 2.86%
 Annual Dividend: \$0.58
 Payout Ratio: 0.41
 Change in Payout Ratio: -0.47
 Last Dividend Payout / Amount: 10/31/2012 / \$0.29

EPS Information

Current Quarter EPS Consensus Estimate: 0.12
 Current Year EPS Consensus Estimate: 1.30
 Estimated Long-Term EPS Growth Rate: 8.20
 Next EPS Report Date: 03/06/2013

Consensus Recommendations

Current (1=Strong Buy, 5=Strong Sell): 2.75
 30 Days Ago: 2.71
 60 Days Ago: 2.75
 90 Days Ago: 2.75

Fundamental Ratios

P/E		EPS Growth		Sales Growth	
Current FY Estimate:	15.60	vs. Previous Year	13.11%	vs. Previous Year	-28.95%
Trailing 12 Months:	14.40	vs. Previous Quarter	109.09%	vs. Previous Quarter:	20.55%
PEG Ratio	1.90				

Price Ratios		ROE		ROA	
Price/Book	0.94	09/30/12	6.78	09/30/12	2.18

Price/Cash Flow	5.54	06/30/12	6.87	06/30/12	2.18
Price / Sales	1.18	03/31/12	6.42	03/31/12	2.02
Current Ratio		Quick Ratio		Operating Margin	
09/30/12	1.20	09/30/12	1.05	09/30/12	8.32
06/30/12	1.04	06/30/12	0.91	06/30/12	7.51
03/31/12	1.00	03/31/12	0.86	03/31/12	6.57
Net Margin		Pre-Tax Margin		Book Value	
09/30/12	26.46	09/30/12	26.46	09/30/12	21.51
06/30/12	22.29	06/30/12	22.29	06/30/12	21.10
03/31/12	19.34	03/31/12	19.34	03/31/12	20.87
Inventory Turnover		Debt-to-Equity		Debt to Capital	
09/30/12	10.07	09/30/12	0.98	09/30/12	49.22
06/30/12	12.92	06/30/12	0.99	06/30/12	49.70
03/31/12	14.88	03/31/12	1.01	03/31/12	50.31

PORTLAND GENERAL ELECTRIC CO (NYSE)
ZACKS RANK: 3 - HOLD

POR 25.48 ▲0.15 (0.59%) Vol. 634,278 14:40 ET

Portland General Electric, headquartered in Portland, Ore., is a vertically integrated electric utility that serves residential, commercial and industrial customers in Oregon. The company has more than a century of experience in power delivery. PGE generates power from a diverse mix of resources, including hydropower, coal and natural gas. PGE also participates in the wholesale market by purchasing and selling electricity and natural gas to utilities and energy marketers.


General Information

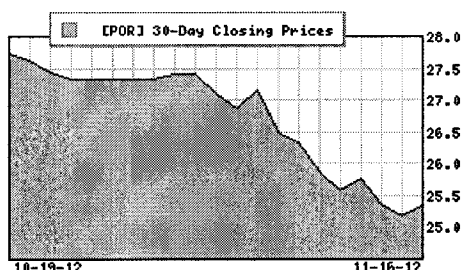
PORTLAND GEN EL
 121 SW SALMON ST 1WTC0501
 PORTLAND, OR 97204
 Phone: 5034647779
 Fax: 503-464-2676
 Web: <http://www.portlandgeneral.com/>
 Email: investors@pgn.com

Industry: UTIL-ELEC PWR
 Sector: Utilities

Fiscal Year End: December
 Last Completed Quarter: 09/30/12
 Next EPS Date: 02/22/2013

Price and Volume Information

Zacks Rank 
 Yesterday's Close: 25.33
 52 Week High: 28.08
 52 Week Low: 23.48
 Beta: 0.65
 20 Day Moving Average: 408,830.44
 Target Price Consensus: 27.69


% Price Change

4 Week: -8.65
 12 Week: -6.15
 YTD: 0.16

% Price Change Relative to S&P 500

4 Week: -3.73
 12 Week: -2.61
 YTD: -7.38

Share Information

Shares Outstanding (millions): 75.53
 Market Capitalization (millions): 1,913.12
 Short Ratio: 3.98
 Last Split Date: N/A

Dividend Information

Dividend Yield: 4.26%
 Annual Dividend: \$1.08
 Payout Ratio: 0.57
 Change in Payout Ratio: -0.03
 Last Dividend Payout / Amount: 09/21/2012 / \$0.27

EPS Information

Current Quarter EPS Consensus Estimate: 0.44
 Current Year EPS Consensus Estimate: 1.91
 Estimated Long-Term EPS Growth Rate: 4.10
 Next EPS Report Date: 02/22/2013

Consensus Recommendations

Current (1=Strong Buy, 5=Strong Sell): 2.67
 30 Days Ago: 2.44
 60 Days Ago: 2.63
 90 Days Ago: 2.63

Fundamental Ratios
P/E

Current FY Estimate: 13.25
 Trailing 12 Months: 13.47
 PEG Ratio: 3.24

EPS Growth

vs. Previous Year: 38.89%
 vs. Previous Quarter: 47.06%

Sales Growth

vs. Previous Year: 2.51%
 vs. Previous Quarter: 8.96%

Price Ratios
ROE
ROA

Price/Book	1.11	09/30/12	8.38	09/30/12	2.47
Price/Cash Flow	5.10	06/30/12	7.80	06/30/12	2.29
Price / Sales	1.05	03/31/12	7.62	03/31/12	2.24
Current Ratio		Quick Ratio		Operating Margin	
09/30/12	1.21	09/30/12	1.09	09/30/12	7.80
06/30/12	1.29	06/30/12	1.14	06/30/12	7.24
03/31/12	1.33	03/31/12	1.19	03/31/12	7.02
Net Margin		Pre-Tax Margin		Book Value	
09/30/12	10.98	09/30/12	10.98	09/30/12	22.76
06/30/12	10.06	06/30/12	10.06	06/30/12	22.53
03/31/12	9.85	03/31/12	9.85	03/31/12	22.49
Inventory Turnover		Debt-to-Equity		Debt to Capital	
09/30/12	12.32	09/30/12	0.89	09/30/12	47.19
06/30/12	12.70	06/30/12	0.93	06/30/12	48.25
03/31/12	13.80	03/31/12	0.96	03/31/12	49.10

SOUTHERN CO (NYSE)

ZACKS RANK: 3 - HOLD

SO 42.64 ▼ -0.05 (-0.12%) Vol. 3,102,199 14:41 ET

Southern Energy acquires, develops, builds, owns and operates power production and delivery facilities and provides a broad range of energy-related services to utilities and industrial companies in selected countries around the world. Southern Energy businesses include independent power projects, integrated utilities, a distribution company, and energy trading and marketing businesses outside the southeastern United States.


General Information

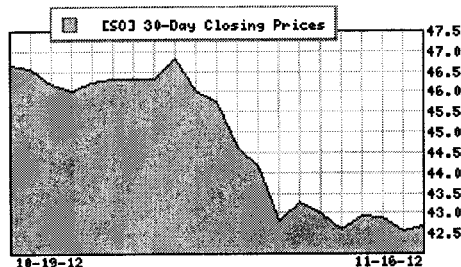
SOUTHN COMPANY
30 IVAN ALLEN JR. BLVD. N.W.
ATLANTA, GA 30308
Phone: 4045065000
Fax: 404-506-0455
Web: <http://www.southernco.com>
Email: dstucker@southernco.com

Industry: UTIL-ELEC PWR
Sector: Utilities

Fiscal Year End: December
Last Completed Quarter: 09/30/12
Next EPS Date: 01/23/2013

Price and Volume Information

Zacks Rank 
Yesterday's Close: 42.69
52 Week High: 48.59
52 Week Low: 42.11
Beta: 0.26
20 Day Moving Average: 5,289,830.50
Target Price Consensus: 46.9



% Price Change

4 Week: -8.47
12 Week: -6.95
YTD: -7.78

% Price Change Relative to S&P 500

4 Week: -3.53
12 Week: -3.45
YTD: -14.71

Share Information

Shares Outstanding (millions): 874.80
Market Capitalization (millions): 37,345.09
Short Ratio: 2.61
Last Split Date: 03/01/1994

Dividend Information

Dividend Yield: 4.59%
Annual Dividend: \$1.96
Payout Ratio: 0.78
Change in Payout Ratio: 0.03
Last Dividend Payout / Amount: 11/01/2012 / \$0.49

EPS Information

Current Quarter EPS Consensus Estimate: 0.40
Current Year EPS Consensus Estimate: 2.63
Estimated Long-Term EPS Growth Rate: 5.20
Next EPS Report Date: 01/23/2013

Consensus Recommendations

Current (1=Strong Buy, 5=Strong Sell): 3.06
30 Days Ago: 3.13
60 Days Ago: 3.13
90 Days Ago: 3.13

Fundamental Ratios

P/E

Current FY Estimate: 16.22
Trailing 12 Months: 16.94
PEG Ratio: 3.11

EPS Growth

vs. Previous Year: 3.74%
vs. Previous Quarter: 60.87%

Sales Growth

vs. Previous Year: -7.02%
vs. Previous Quarter: 20.76%

Price Ratios

Price/Book: 2.00 09/30/12

ROE

09/30/12

ROA

12.43 09/30/12 3.70

Price/Cash Flow	8.53	06/30/12	12.27	06/30/12	3.67
Price / Sales	2.26	03/31/12	12.48	03/31/12	3.75
Current Ratio		Quick Ratio		Operating Margin	
09/30/12	1.02	09/30/12	0.63	09/30/12	13.55
06/30/12	1.05	06/30/12	0.62	06/30/12	12.89
03/31/12	0.96	03/31/12	0.56	03/31/12	12.64
Net Margin		Pre-Tax Margin		Book Value	
09/30/12	21.10	09/30/12	21.10	09/30/12	21.31
06/30/12	20.12	06/30/12	20.12	06/30/12	20.86
03/31/12	19.73	03/31/12	19.73	03/31/12	20.53
Inventory Turnover		Debt-to-Equity		Debt to Capital	
09/30/12	0.69	09/30/12	1.02	09/30/12	49.01
06/30/12	0.95	06/30/12	1.07	06/30/12	50.33
03/31/12	1.16	03/31/12	1.08	03/31/12	50.36

WESTERN ENERGY INC (NYSE)
ZACKS RANK: 2 - BUY

WR 27.86 ▼ -0.04 (-0.14%) Vol. 360,435 14:42 ET

Westar Energy is a consumer services company with interests in monitored services and energy. Westar Energy provides electric utility services to customers in Kansas. Westar Energy's goal is to operate the best utility in the Midwest. They will provide their customers quality service at below average prices. Westar Energy Generation and Marketing will be a preferred energy provider, both inside and outside their service territory.


General Information

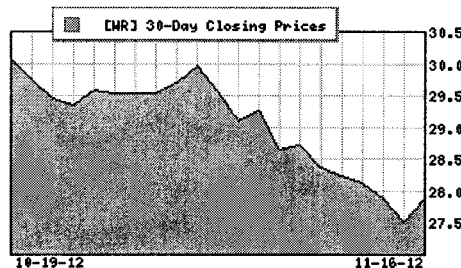
WESTAR ENERGY
 818 S KANSAS AVE
 TOPEKA, KS 66601
 Phone: 785-575-6300
 Fax: 785-575-6596
 Web: <http://www.westarenergy.com>
 Email: ir@westarenergy.com

Industry: UTIL-ELEC PWR
 Sector: Utilities

Fiscal Year End: December
 Last Completed Quarter: 09/30/12
 Next EPS Date: 02/21/2013

Price and Volume Information

Zacks Rank: 
 Yesterday's Close: 27.90
 52 Week High: 33.04
 52 Week Low: 25.79
 Beta: 0.56
 20 Day Moving Average: 522,266.84
 Target Price Consensus: 32


% Price Change

4 Week: -7.22
 12 Week: -4.58
 YTD: -3.06

% Price Change Relative to S&P 500

4 Week: -2.21
 12 Week: -0.99
 YTD: -10.35

Share Information

Shares Outstanding (millions): 126.32
 Market Capitalization (millions): 3,524.19
 Short Ratio: 4.27
 Last Split Date: N/A

Dividend Information

Dividend Yield: 4.73%
 Annual Dividend: \$1.32
 Payout Ratio: 0.68
 Change in Payout Ratio: -0.15
 Last Dividend Payout / Amount: 09/05/2012 / \$0.33

EPS Information

Current Quarter EPS Consensus Estimate: 0.23
 Current Year EPS Consensus Estimate: 1.97
 Estimated Long-Term EPS Growth Rate: 5.70
 Next EPS Report Date: 02/21/2013

Consensus Recommendations

Current (1=Strong Buy, 5=Strong Sell): 2.11
 30 Days Ago: 2.11
 60 Days Ago: 2.25
 90 Days Ago: 2.11

Fundamental Ratios

P/E		EPS Growth		Sales Growth	
Current FY Estimate:	14.20	vs. Previous Year	12.24%	vs. Previous Year	2.60%
Trailing 12 Months:	14.31	vs. Previous Quarter	129.17%	vs. Previous Quarter:	22.87%
PEG Ratio	2.50				

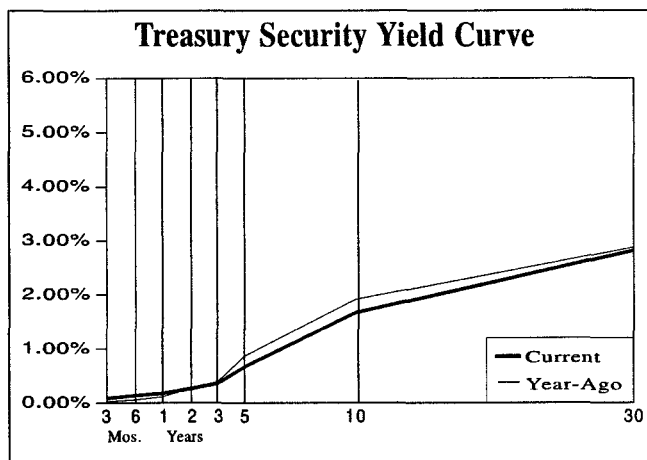
Price Ratios		ROE		ROA	
Price/Book	1.22	09/30/12		8.87	09/30/12
					2.79

Price/Cash Flow	6.06	06/30/12	8.20	06/30/12	2.57
Price / Sales	1.58	03/31/12	7.75	03/31/12	2.40
Current Ratio		Quick Ratio		Operating Margin	
09/30/12	0.92	09/30/12	0.58	09/30/12	11.20
06/30/12	0.84	06/30/12	0.54	06/30/12	10.17
03/31/12	0.72	03/31/12	0.43	03/31/12	9.50
Net Margin		Pre-Tax Margin		Book Value	
09/30/12	16.72	09/30/12	16.72	09/30/12	22.95
06/30/12	16.43	06/30/12	16.43	06/30/12	22.14
03/31/12	15.46	03/31/12	15.46	03/31/12	21.96
Inventory Turnover		Debt-to-Equity		Debt to Capital	
09/30/12	4.87	09/30/12	1.06	09/30/12	51.37
06/30/12	5.12	06/30/12	1.09	06/30/12	52.13
03/31/12	5.24	03/31/12	1.05	03/31/12	50.93

ATTACHMENT C

Selected Yields

	Recent (11/20/12)	3 Months Ago (8/22/12)	Year Ago (11/22/11)		Recent (11/20/12)	3 Months Ago (8/22/12)	Year Ago (11/22/11)
TAXABLE							
Market Rates				Mortgage-Backed Securities			
Discount Rate	0.75	0.75	0.75	GNMA 5.5%	1.73	0.96	1.25
Federal Funds	0.00-0.25	0.00-0.25	0.00-0.25	FHLMC 5.5% (Gold)	2.09	2.12	2.33
Prime Rate	3.25	3.25	3.25	FNMA 5.5%	1.73	1.94	2.05
30-day CP (A1/P1)	0.22	0.31	0.44	FNMA ARM	2.19	2.27	2.43
3-month LIBOR	0.31	0.43	0.50	Corporate Bonds			
Bank CDs				Financial (10-year) A	2.91	3.09	4.45
6-month	0.11	0.17	0.17	Industrial (25/30-year) A	3.78	3.82	4.20
1-year	0.16	0.21	0.21	Utility (25/30-year) A	3.78	3.85	4.06
5-year	0.76	0.96	1.14	Utility (25/30-year) Baa/BBB	4.13	4.28	4.74
U.S. Treasury Securities				Foreign Bonds (10-Year)			
3-month	0.09	0.10	0.02	Canada	1.76	1.84	2.08
6-month	0.14	0.13	0.06	Germany	1.42	1.46	1.92
1-year	0.18	0.18	0.11	Japan	0.74	0.83	0.97
5-year	0.67	0.70	0.87	United Kingdom	1.85	1.63	2.17
10-year	1.67	1.70	1.92	Preferred Stocks			
10-year (inflation-protected)	-0.76	-0.58	0.01	Utility A	5.12	5.32	5.84
30-year	2.82	2.82	2.88	Financial BBB	6.09	6.08	6.31
30-year Zero	3.04	3.00	3.05	Financial Adjustable A	5.52	5.52	5.52



TAX-EXEMPT

Bond Buyer Indexes			
20-Bond Index (GOs)	3.41	3.80	4.09
25-Bond Index (Revs)	4.17	4.52	5.09
General Obligation Bonds (GOs)			
1-year Aaa	0.17	0.20	0.24
1-year A	0.78	0.88	1.06
5-year Aaa	0.67	0.79	1.22
5-year A	1.65	1.85	2.33
10-year Aaa	1.76	2.06	2.48
10-year A	2.80	3.19	3.53
25/30-year Aaa	3.13	3.36	3.97
25/30-year A	4.70	4.79	5.34
Revenue Bonds (Revs) (25/30-Year)			
Education AA	4.18	4.27	4.60
Electric AA	4.27	4.55	4.82
Housing AA	4.64	4.73	5.53
Hospital AA	4.30	4.48	4.92
Toll Road Aaa	4.22	4.31	4.58

Source: Bloomberg Finance L.P.

Federal Reserve Data

BANK RESERVES

(Two-Week Period; in Millions, Not Seasonally Adjusted)

	Recent Levels			Average Levels Over the Last...		
	11/14/12	10/31/12	Change	12 Wks.	26 Wks.	52 Wks.
Excess Reserves	1438804	1422943	15861	1430434	1449840	1479638
Borrowed Reserves	1128	1363	-235	1961	3513	5862
Net Free/Borrowed Reserves	1437676	1421580	16096	1428473	1446327	1473776

MONEY SUPPLY

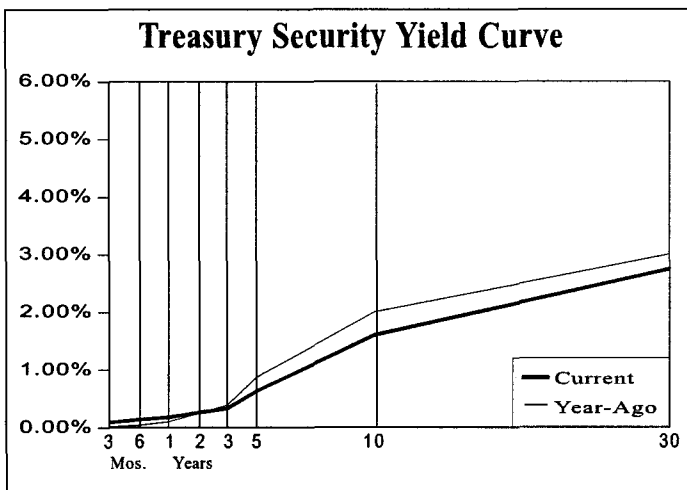
(One-Week Period; in Billions, Seasonally Adjusted)

	Recent Levels			Ann'l Growth Rates Over the Last...		
	11/5/12	10/29/12	Change	3 Mos.	6 Mos.	12 Mos.
M1 (Currency+demand deposits)	2420.9	2419.4	1.5	20.3%	15.9%	13.6%
M2 (M1+savings+small time deposits)	10291.9	10255.5	36.4	12.1%	8.5%	7.6%

Source: United States Federal Reserve Bank

Selected Yields

	Recent (11/14/12)	3 Months Ago (8/15/12)	Year Ago (11/16/11)		Recent (11/14/12)	3 Months Ago (8/15/12)	Year Ago (11/16/11)
TAXABLE							
Market Rates							
Discount Rate	0.75	0.75	0.75				
Federal Funds	0.00-0.25	0.00-0.25	0.00-0.25				
Prime Rate	3.25	3.25	3.25				
30-day CP (A1/P1)	0.23	0.21	0.47				
3-month LIBOR	0.31	0.43	0.47				
Bank CDs							
6-month	0.11	0.20	0.17				
1-year	0.16	0.31	0.21				
5-year	0.76	1.09	1.14				
U.S. Treasury Securities							
3-month	0.09	0.08	0.01				
6-month	0.14	0.14	0.04				
1-year	0.18	0.18	0.10				
5-year	0.63	0.80	0.87				
10-year	1.60	1.82	2.00				
10-year (inflation-protected)	-0.84	-0.45	0.03				
30-year	2.74	2.92	3.00				
30-year Zero	2.95	3.12	3.21				
Mortgage-Backed Securities							
GNMA 5.5%	1.95	1.03	1.25				
FHLMC 5.5% (Gold)	2.15	1.89	2.35				
FNMA 5.5%	1.74	1.69	2.09				
FNMA ARM	2.20	2.27	2.43				
Corporate Bonds							
Financial (10-year) A	2.79	3.23	4.38				
Industrial (25/30-year) A	3.67	3.96	4.31				
Utility (25/30-year) A	3.66	3.95	4.17				
Utility (25/30-year) Baa/BBB	4.00	4.39	4.85				
Foreign Bonds (10-Year)							
Canada	1.70	1.95	2.10				
Germany	1.34	1.56	1.82				
Japan	0.75	0.82	0.95				
United Kingdom	1.75	1.68	2.16				
Preferred Stocks							
Utility A	5.11	5.31	5.26				
Financial BBB	6.09	6.07	6.30				
Financial Adjustable A	5.51	5.51	5.52				



TAX-EXEMPT

Bond Buyer Indexes							
20-Bond Index (GOs)	3.55	3.75	4.02				
25-Bond Index (Revs)	4.23	4.50	5.00				
General Obligation Bonds (GOs)							
1-year Aaa	0.22	0.17	0.24				
1-year A	0.82	0.85	1.07				
5-year Aaa	0.68	0.77	1.26				
5-year A	1.67	1.83	2.33				
10-year Aaa	1.84	1.96	2.50				
10-year A	2.89	3.10	3.51				
25/30-year Aaa	3.20	3.31	4.01				
25/30-year A	4.72	4.78	5.38				
Revenue Bonds (Revs) (25/30-Year)							
Education AA	4.20	4.21	4.56				
Electric AA	4.29	4.49	4.89				
Housing AA	4.66	4.67	5.57				
Hospital AA	4.35	4.46	4.93				
Toll Road Aaa	4.24	4.30	4.57				

Source: Bloomberg Finance L.P.

Federal Reserve Data

BANK RESERVES

(Two-Week Period; in Millions, Not Seasonally Adjusted)

	Recent Levels			Average Levels Over the Last...		
	10/31/12	10/17/12	Change	12 Wks.	26 Wks.	52 Wks.
Excess Reserves	1422945	1423709	-764	1439552	1451187	1482492
Borrowed Reserves	1363	1527	-164	2325	3906	6227
Net Free/Borrowed Reserves	1421582	1422182	-600	1437227	1447281	1476265

MONEY SUPPLY

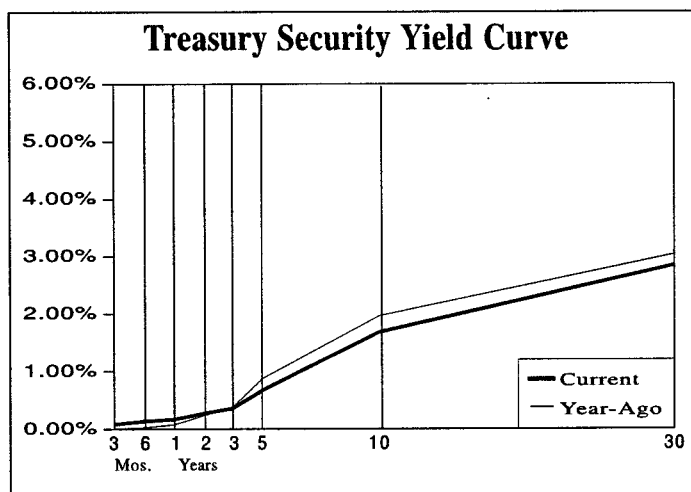
(One-Week Period; in Billions, Seasonally Adjusted)

	Recent Levels			Ann'l Growth Rates Over the Last...		
	10/29/12	10/22/12	Change	3 Mos.	6 Mos.	12 Mos.
M1 (Currency+demand deposits)	2419.5	2401.6	17.9	18.1%	15.3%	13.3%
M2 (M1+savings+small time deposits)	10257.3	10211.8	45.5	9.8%	7.7%	7.4%

Source: United States Federal Reserve Bank

Selected Yields

	Recent (11/07/12)	3 Months Ago (8/08/12)	Year Ago (11/09/11)		Recent (11/07/12)	3 Months Ago (8/08/12)	Year Ago (11/09/11)
TAXABLE							
Market Rates							
Discount Rate	0.75	0.75	0.75				
Federal Funds	0.00-0.25	0.00-0.25	0.00-0.25				
Prime Rate	3.25	3.25	3.25				
30-day CP (A1/P1)	0.23	0.30	0.49				
3-month LIBOR	0.31	0.44	0.45				
Bank CDs							
6-month	0.12	0.20	0.17				
1-year	0.16	0.31	0.21				
5-year	0.81	1.09	1.14				
U.S. Treasury Securities							
3-month	0.09	0.11	0.01				
6-month	0.14	0.14	0.03				
1-year	0.17	0.18	0.08				
5-year	0.67	0.73	0.87				
10-year	1.68	1.65	1.96				
10-year (inflation-protected)	-0.82	-0.63	-0.05				
30-year	2.84	2.75	3.03				
30-year Zero	3.05	2.95	3.25				
Mortgage-Backed Securities							
GNMA 5.5%	1.53	0.96	1.37				
FHLMC 5.5% (Gold)	1.83	1.72	2.35				
FNMA 5.5%	1.42	1.52	2.03				
FNMA ARM	2.19	2.27	2.43				
Corporate Bonds							
Financial (10-year) A	2.90	3.16	4.09				
Industrial (25/30-year) A	3.71	3.83	4.23				
Utility (25/30-year) A	3.77	3.81	4.14				
Utility (25/30-year) Baa/BBB	4.12	4.24	4.83				
Foreign Bonds (10-Year)							
Canada	1.75	1.82	2.09				
Germany	1.38	1.42	1.72				
Japan	0.76	0.80	0.98				
United Kingdom	1.76	1.57	2.18				
Preferred Stocks							
Utility A	5.11	5.11	5.82				
Financial BBB	6.08	5.90	5.70				
Financial Adjustable A	5.51	5.51	5.51				



TAX-EXEMPT

Bond Buyer Indexes							
20-Bond Index (GOs)	3.67	3.66	4.02				
25-Bond Index (Revs)	4.29	4.46	5.05				
General Obligation Bonds (GOs)							
1-year Aaa	0.21	0.18	0.25				
1-year A	0.83	0.87	1.06				
5-year Aaa	0.74	0.73	1.27				
5-year A	1.72	1.79	2.33				
10-year Aaa	1.95	1.91	2.51				
10-year A	3.01	3.05	3.52				
25/30-year Aaa	3.28	3.29	4.01				
25/30-year A	4.79	4.78	5.35				
Revenue Bonds (Revs) (25/30-Year)							
Education AA	4.24	4.17	4.56				
Electric AA	4.33	4.53	4.90				
Housing AA	4.70	4.67	5.58				
Hospital AA	4.42	4.44	4.92				
Toll Road Aaa	4.27	4.30	4.55				

Source: Bloomberg Finance L.P.

Federal Reserve Data

BANK RESERVES

(Two-Week Period; in Millions, Not Seasonally Adjusted)

	Recent Levels			Average Levels Over the Last...		
	10/31/12	10/17/12	Change	12 Wks.	26 Wks.	52 Wks.
Excess Reserves	1422927	1423708	-781	1439550	1451186	1482491
Borrowed Reserves	1363	1527	-164	2325	3906	6227
Net Free/Borrowed Reserves	1421564	1422181	-617	1437225	1447280	1476264

MONEY SUPPLY

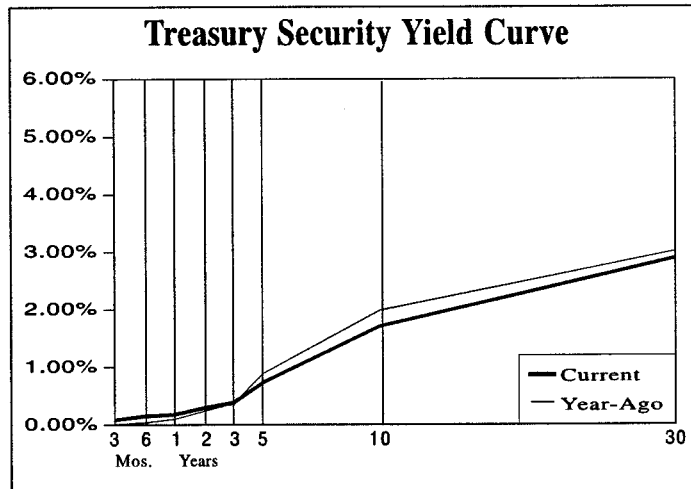
(One-Week Period; in Billions, Seasonally Adjusted)

	Recent Levels			Ann'l Growth Rates Over the Last...		
	10/22/12	10/15/12	Change	3 Mos.	6 Mos.	12 Mos.
M1 (Currency+demand deposits)	2401.7	2386.8	14.9	16.6%	13.8%	12.2%
M2 (M1+savings+small time deposits)	10211.8	10210.8	1.0	8.1%	8.0%	7.2%

Source: United States Federal Reserve Bank

Selected Yields

	Recent (10/31/12)	3 Months Ago (8/01/12)	Year Ago (11/02/11)		Recent (10/31/12)	3 Months Ago (8/01/12)	Year Ago (11/02/11)
TAXABLE							
Market Rates							
Discount Rate	0.75	0.75	0.75				
Federal Funds	0.00-0.25	0.00-0.25	0.00-0.25				
Prime Rate	3.25	3.25	3.25				
30-day CP (A1/P1)	0.24	0.30	0.51				
3-month LIBOR	0.31	0.44	0.43				
Bank CDs							
6-month	0.12	0.20	0.17				
1-year	0.16	0.31	0.21				
5-year	0.81	1.09	1.14				
U.S. Treasury Securities							
3-month	0.09	0.09	0.01				
6-month	0.15	0.14	0.04				
1-year	0.18	0.17	0.10				
5-year	0.73	0.64	0.88				
10-year	1.71	1.55	1.99				
10-year (inflation-protected)	-0.81	-0.69	-0.10				
30-year	2.89	2.62	3.01				
30-year Zero	3.08	2.79	3.22				
Mortgage-Backed Securities							
GNMA 5.5%	1.42	0.93	1.62				
FHLMC 5.5% (Gold)	1.76	1.63	2.34				
FNMA 5.5%	1.42	1.53	2.10				
FNMA ARM	2.27	2.27	2.43				
Corporate Bonds							
Financial (10-year) A	2.96	3.04	4.15				
Industrial (25/30-year) A	3.77	3.72	4.18				
Utility (25/30-year) A	3.83	3.69	4.12				
Utility (25/30-year) Baa/BBB	4.20	4.13	4.76				
Foreign Bonds (10-Year)							
Canada	1.79	1.71	2.17				
Germany	1.46	1.37	1.83				
Japan	0.78	0.78	1.00				
United Kingdom	1.85	1.52	2.29				
Preferred Stocks							
Utility A	5.10	5.12	5.82				
Financial BBB	6.06	5.92	6.57				
Financial Adjustable A	5.50	5.50	5.50				



TAX-EXEMPT

Bond Buyer Indexes							
20-Bond Index (GOs)	3.68	3.61	4.12				
25-Bond Index (Revs)	4.33	4.44	5.10				
General Obligation Bonds (GOs)							
1-year Aaa	0.22	0.17	0.24				
1-year A	0.84	0.90	1.05				
5-year Aaa	0.73	0.73	1.28				
5-year A	1.71	1.79	2.35				
10-year Aaa	1.95	1.84	2.57				
10-year A	3.02	2.99	3.56				
25/30-year Aaa	3.29	3.27	4.03				
25/30-year A	4.80	4.75	5.37				
Revenue Bonds (Revs) (25/30-Year)							
Education AA	4.24	4.13	4.55				
Electric AA	4.33	4.49	4.90				
Housing AA	4.70	4.61	5.59				
Hospital AA	4.43	4.44	4.94				
Toll Road Aaa	4.27	4.35	4.55				

Source: Bloomberg Finance L.P.

Federal Reserve Data

BANK RESERVES

(Two-Week Period; in Millions, Not Seasonally Adjusted)

	Recent Levels			Average Levels Over the Last...		
	10/17/12	10/3/12	Change	12 Wks.	26 Wks.	52 Wks.
Excess Reserves	1423708	1371236	52472	1449745	1457405	1488008
Borrowed Reserves	1527	1662	-135	2734	4309	6596
Net Free/Borrowed Reserves	1422181	1369574	52607	1447011	1453096	1481412

MONEY SUPPLY

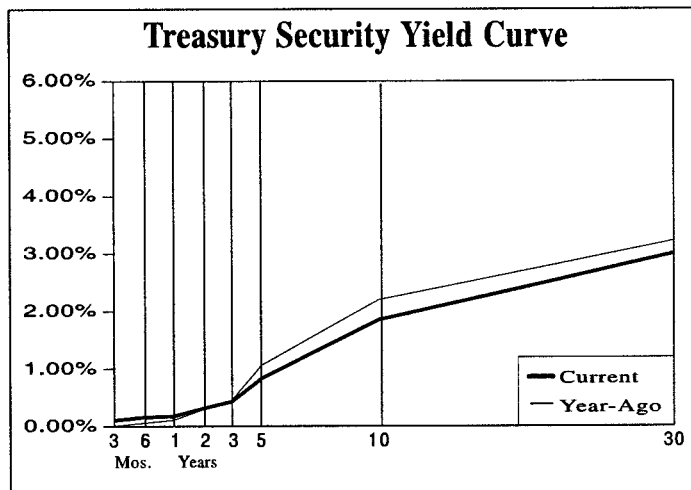
(One-Week Period; in Billions, Seasonally Adjusted)

	Recent Levels			Ann'l Growth Rates Over the Last...		
	10/15/12	10/8/12	Change	3 Mos.	6 Mos.	12 Mos.
M1 (Currency+demand deposits)	2386.9	2371.5	15.4	17.8%	13.3%	11.6%
M2 (M1+savings+small time deposits)	10211.3	10182.4	28.9	7.9%	7.1%	7.2%

Source: United States Federal Reserve Bank

Selected Yields

	Recent (10/24/12)	3 Months Ago (7/25/12)	Year Ago (10/26/11)		Recent (10/24/12)	3 Months Ago (7/25/12)	Year Ago (10/26/11)
TAXABLE							
Market Rates							
Discount Rate	0.75	0.75	0.75				
Federal Funds	0.00-0.25	0.00-0.25	0.00-0.25				
Prime Rate	3.25	3.25	3.25				
30-day CP (A1/P1)	0.23	0.32	0.49				
3-month LIBOR	0.31	0.45	0.42				
Bank CDs							
6-month	0.12	0.20	0.17				
1-year	0.16	0.31	0.21				
5-year	0.81	1.09	1.14				
U.S. Treasury Securities							
3-month	0.11	0.10	0.01				
6-month	0.16	0.14	0.06				
1-year	0.18	0.17	0.11				
5-year	0.83	0.58	1.06				
10-year	1.85	1.42	2.20				
10-year (inflation-protected)	-0.69	-0.68	0.12				
30-year	3.00	2.48	3.22				
30-year Zero	3.17	2.64	3.43				
Mortgage-Backed Securities							
GNMA 5.5%	1.40	1.06	1.76				
FHLMC 5.5% (Gold)	1.85	1.52	2.39				
FNMA 5.5%	1.48	1.54	2.19				
FNMA ARM	2.22	2.27	2.47				
Corporate Bonds							
Financial (10-year) A	3.07	3.00	4.41				
Industrial (25/30-year) A	3.81	3.62	4.49				
Utility (25/30-year) A	3.85	3.59	4.41				
Utility (25/30-year) Baa/BBB	4.23	4.01	5.05				
Foreign Bonds (10-Year)							
Canada	1.85	1.59	2.38				
Germany	1.56	1.26	2.04				
Japan	0.78	0.73	1.00				
United Kingdom	1.85	1.46	2.47				
Preferred Stocks							
Utility A	5.10	5.23	5.21				
Financial BBB	6.06	5.92	6.49				
Financial Adjustable A	5.50	5.50	5.50				



TAX-EXEMPT

Bond Buyer Indexes							
20-Bond Index (GOs)	3.68	3.75	4.08				
25-Bond Index (Revs)	4.33	4.51	5.07				
General Obligation Bonds (GOs)							
1-year Aaa	0.20	0.19	0.29				
1-year A	0.86	0.90	1.00				
5-year Aaa	0.73	0.75	1.41				
5-year A	1.70	1.80	2.42				
10-year Aaa	1.95	1.87	2.69				
10-year A	3.04	2.98	3.60				
25/30-year Aaa	3.30	3.29	4.10				
25/30-year A	4.81	4.74	5.42				
Revenue Bonds (Revs) (25/30-Year)							
Education AA	4.24	4.16	4.56				
Electric AA	4.32	4.52	4.94				
Housing AA	4.69	4.64	5.66				
Hospital AA	4.43	4.44	4.97				
Toll Road Aaa	4.26	4.32	4.57				

Source: Bloomberg Finance L.P.

Federal Reserve Data

BANK RESERVES

(Two-Week Period; in Millions, Not Seasonally Adjusted)

	Recent Levels			Average Levels Over the Last...		
	10/17/12	10/3/12	Change	12 Wks.	26 Wks.	52 Wks.
Excess Reserves	1423713	1371238	52475	1449746	1457406	1488008
Borrowed Reserves	1527	1662	-135	2734	4309	6596
Net Free/Borrowed Reserves	1422186	1369576	52610	1447012	1453097	1481412

MONEY SUPPLY

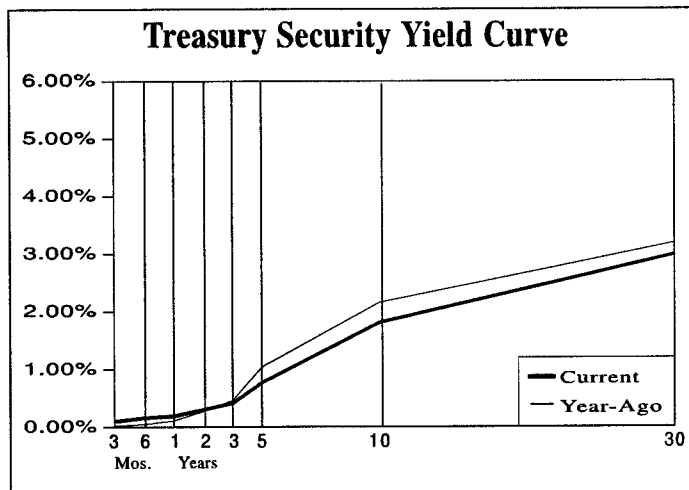
(One-Week Period; in Billions, Seasonally Adjusted)

	Recent Levels			Ann'l Growth Rates Over the Last...		
	10/8/12	10/1/12	Change	3 Mos.	6 Mos.	12 Mos.
M1 (Currency+demand deposits)	2371.4	2374.1	-2.7	18.9%	13.0%	11.1%
M2 (M1+savings+small time deposits)	10182.4	10194.9	-12.5	8.5%	7.0%	7.1%

Source: United States Federal Reserve Bank

Selected Yields

	Recent (10/17/12)	3 Months Ago (7/18/12)	Year Ago (10/19/11)		Recent (10/17/12)	3 Months Ago (7/18/12)	Year Ago (10/19/11)
TAXABLE							
Market Rates							
Discount Rate	0.75	0.75	0.75				
Federal Funds	0.00-0.25	0.00-0.25	0.00-0.25				
Prime Rate	3.25	3.25	3.25				
30-day CP (A1/P1)	0.25	0.26	0.44				
3-month LIBOR	0.32	0.46	0.41				
Bank CDs							
6-month	0.12	0.20	0.17				
1-year	0.16	0.31	0.21				
5-year	0.86	1.09	1.14				
U.S. Treasury Securities							
3-month	0.10	0.09	0.02				
6-month	0.16	0.13	0.05				
1-year	0.19	0.16	0.11				
5-year	0.77	0.61	1.04				
10-year	1.81	1.50	2.16				
10-year (inflation-protected)	-0.67	-0.64	0.20				
30-year	2.98	2.60	3.18				
30-year Zero	3.23	2.80	3.38				
Mortgage-Backed Securities							
GNMA 5.5%	1.05	1.13	1.84				
FHLMC 5.5% (Gold)	1.89	1.61	2.36				
FNMA 5.5%	1.54	1.60	2.17				
FNMA ARM	2.22	2.27	2.47				
Corporate Bonds							
Financial (10-year) A	3.10	3.11	4.33				
Industrial (25/30-year) A	3.88	3.78	4.53				
Utility (25/30-year) A	3.94	3.74	4.40				
Utility (25/30-year) Baa/BBB	4.27	4.17	4.92				
Foreign Bonds (10-Year)							
Canada	1.81	1.62	2.33				
Germany	1.63	1.20	2.06				
Japan	0.77	0.76	1.02				
United Kingdom	1.92	1.48	2.47				
Preferred Stocks							
Utility A	5.09	5.39	5.25				
Financial BBB	6.05	6.51	6.69				
Financial Adjustable A	5.49	5.49	5.49				



TAX-EXEMPT

Bond Buyer Indexes							
20-Bond Index (GOs)	3.64	3.83	4.17				
25-Bond Index (Revs)	4.32	4.56	5.06				
General Obligation Bonds (GOs)							
1-year Aaa	0.20	0.19	0.25				
1-year A	0.84	0.89	1.08				
5-year Aaa	0.68	0.79	1.39				
5-year A	1.67	1.88	2.40				
10-year Aaa	1.89	1.92	2.69				
10-year A	3.01	3.03	3.67				
25/30-year Aaa	3.28	3.35	4.09				
25/30-year A	4.79	4.77	5.45				
Revenue Bonds (Revs) (25/30-Year)							
Education AA	4.23	4.26	4.56				
Electric AA	4.31	4.58	4.94				
Housing AA	4.68	4.72	5.64				
Hospital AA	4.41	4.50	4.97				
Toll Road Aaa	4.23	4.35	4.57				

Source: Bloomberg Finance L.P.

Federal Reserve Data

BANK RESERVES

(Two-Week Period; in Millions, Not Seasonally Adjusted)

	Recent Levels			Average Levels Over the Last...		
	10/3/12	9/19/12	Change	12 Wks.	26 Wks.	52 Wks.
Excess Reserves	1371241	1424682	-53441	1454652	1462067	1492376
Borrowed Reserves	1662	2007	-345	3176	4706	6963
Net Free/Borrowed Reserves	1369579	1422675	-53096	1451477	1457362	1485413

MONEY SUPPLY

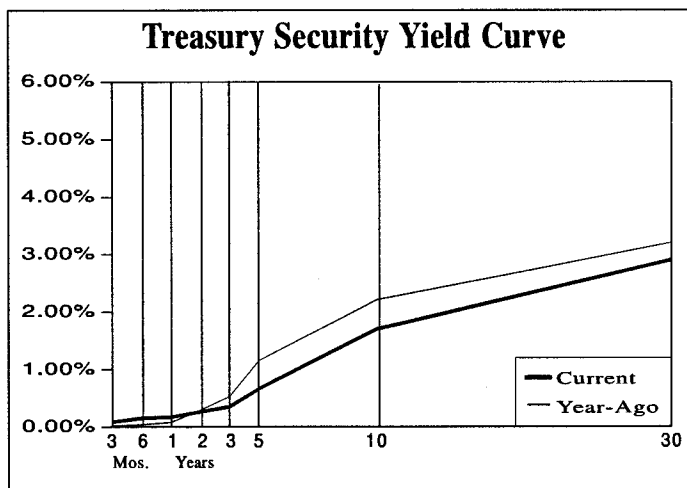
(One-Week Period; in Billions, Seasonally Adjusted)

	Recent Levels			Ann'l Growth Rates Over the Last...		
	10/1/12	9/24/12	Change	3 Mos.	6 Mos.	12 Mos.
M1 (Currency+demand deposits)	2374.3	2391.1	-16.8	22.7%	13.8%	11.6%
M2 (M1+savings+small time deposits)	10197.0	10123.0	74.0	9.1%	7.2%	7.2%

Source: United States Federal Reserve Bank

Selected Yields

	Recent (10/10/12)	3 Months Ago (7/11/12)	Year Ago (10/12/11)		Recent (10/10/12)	3 Months Ago (7/11/12)	Year Ago (10/12/11)
TAXABLE							
Market Rates							
Discount Rate	0.75	0.75	0.75				
Federal Funds	0.00-0.25	0.00-0.25	0.00-0.25				
Prime Rate	3.25	3.25	3.25				
30-day CP (A1/P1)	0.26	0.36	0.38				
3-month LIBOR	0.34	0.46	0.40				
Bank CDs							
6-month	0.13	0.20	0.17				
1-year	0.16	0.31	0.21				
5-year	0.86	1.09	1.14				
U.S. Treasury Securities							
3-month	0.09	0.09	0.02				
6-month	0.15	0.15	0.04				
1-year	0.17	0.19	0.08				
5-year	0.66	0.64	1.15				
10-year	1.70	1.52	2.21				
10-year (inflation-protected)	-0.83	-0.61	0.23				
30-year	2.90	2.61	3.20				
30-year Zero	3.11	2.81	3.39				
Mortgage-Backed Securities							
GNMA 5.5%	0.78	1.17	1.89				
FHLMC 5.5% (Gold)	1.84	1.66	2.32				
FNMA 5.5%	1.52	1.60	2.17				
FNMA ARM	2.22	2.27	2.47				
Corporate Bonds							
Financial (10-year) A	3.03	3.19	4.37				
Industrial (25/30-year) A	3.80	3.82	4.59				
Utility (25/30-year) A	3.84	3.80	4.53				
Utility (25/30-year) Baa/BBB	4.15	4.25	4.99				
Foreign Bonds (10-Year)							
Canada	1.79	1.68	2.35				
Germany	1.49	1.27	2.19				
Japan	0.77	0.79	1.00				
United Kingdom	1.77	1.57	2.64				
Preferred Stocks							
Utility A	5.09	5.38	5.57				
Financial BBB	6.04	6.41	6.81				
Financial Adjustable A	5.49	5.49	5.49				



TAX-EXEMPT

Bond Buyer Indexes							
20-Bond Index (GOs)	3.61	3.94	4.14				
25-Bond Index (Revs)	4.28	4.65	5.04				
General Obligation Bonds (GOs)							
1-year Aaa	0.20	0.20	0.26				
1-year A	0.83	0.89	1.11				
5-year Aaa	0.67	0.82	1.41				
5-year A	1.66	1.90	2.43				
10-year Aaa	1.87	2.01	2.63				
10-year A	2.99	3.09	3.75				
25/30-year Aaa	3.29	3.47	4.12				
25/30-year A	4.79	4.84	5.50				
Revenue Bonds (Revs) (25/30-Year)							
Education AA	4.23	4.30	4.59				
Electric AA	4.31	4.62	4.97				
Housing AA	4.68	4.76	5.63				
Hospital AA	4.41	4.55	5.00				
Toll Road Aaa	4.23	4.39	4.60				

Source: Bloomberg Finance L.P.

Federal Reserve Data

BANK RESERVES

(Two-Week Period; in Millions, Not Seasonally Adjusted)

	Recent Levels			Average Levels Over the Last...		
	10/3/12	9/19/12	Change	12 Wks.	26 Wks.	52 Wks.
Excess Reserves	1371232	1425102	-53870	1454711	1462097	1492391
Borrowed Reserves	1662	2007	-345	3176	4706	6963
Net Free/Borrowed Reserves	1369570	1423095	-53525	1451536	1457391	1485429

MONEY SUPPLY

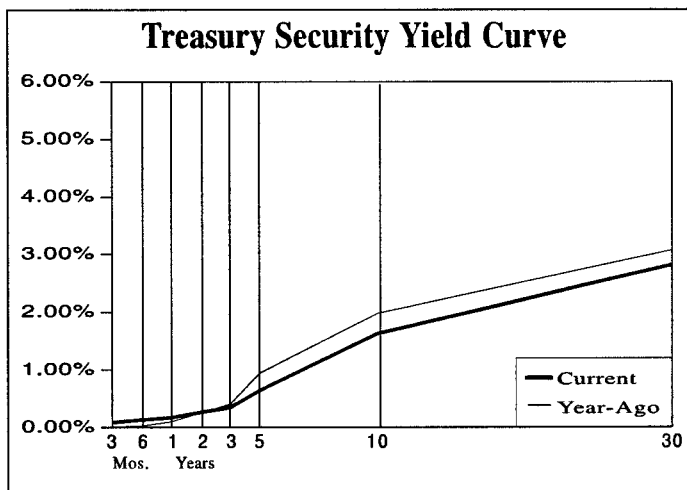
(One-Week Period; in Billions, Seasonally Adjusted)

	Recent Levels			Ann'l Growth Rates Over the Last...		
	9/24/12	9/17/12	Change	3 Mos.	6 Mos.	12 Mos.
M1 (Currency+demand deposits)	2393.3	2385.9	7.4	27.2%	16.2%	13.0%
M2 (M1+savings+small time deposits)	10138.2	10138.1	0.1	7.8%	6.4%	6.7%

Source: United States Federal Reserve Bank

Selected Yields

	Recent (10/3/12)	3 Months Ago (7/03/12)	Year Ago (10/05/11)		Recent (10/3/12)	3 Months Ago (7/03/12)	Year Ago (10/05/11)
TAXABLE							
Market Rates							
Discount Rate	0.75	0.75	0.75				
Federal Funds	0.00-0.25	0.00-0.25	0.00-0.25				
Prime Rate	3.25	3.25	3.25				
30-day CP (A1/P1)	0.28	0.26	0.41				
3-month LIBOR	0.35	0.46	0.38				
Bank CDs							
6-month	0.13	0.20	0.17				
1-year	0.16	0.32	0.21				
5-year	0.86	1.09	1.18				
U.S. Treasury Securities							
3-month	0.09	0.08	0.01				
6-month	0.13	0.15	0.02				
1-year	0.16	0.20	0.09				
5-year	0.62	0.70	0.95				
10-year	1.57	1.63	1.89				
10-year (inflation-protected)	-0.90	-0.51	0.08				
30-year	2.68	2.74	2.85				
30-year Zero	3.08	2.95	3.03				
Mortgage-Backed Securities							
GNMA 5.5%	0.77	1.39	1.54				
FHLMC 5.5% (Gold)	2.00	1.92	2.23				
FNMA 5.5%	1.69	1.84	2.13				
FNMA ARM	2.22	2.27	2.47				
Corporate Bonds							
Financial (10-year) A	3.00	3.33	3.88				
Industrial (25/30-year) A	3.78	3.99	4.29				
Utility (25/30-year) A	3.84	3.93	4.21				
Utility (25/30-year) Baa/BBB	4.16	4.37	4.65				
Foreign Bonds (10-Year)							
Canada	1.74	1.71	2.14				
Germany	1.47	1.45	1.84				
Japan	0.77	0.82	0.97				
United Kingdom	1.72	1.72	2.36				
Preferred Stocks							
Utility A	5.14	5.39	5.29				
Financial BBB	6.51	6.53	6.51				
Financial Adjustable A	5.48	5.48	5.48				



TAX-EXEMPT

Bond Buyer Indexes							
20-Bond Index (GOs)	3.67	3.95	3.93				
25-Bond Index (Revs)	4.31	4.69	5.01				
General Obligation Bonds (GOs)							
1-year Aaa	0.19	0.19	0.20				
1-year A	0.82	0.91	0.97				
5-year Aaa	0.69	0.86	1.13				
5-year A	1.62	1.91	2.18				
10-year Aaa	1.90	2.04	2.36				
10-year A	3.01	3.13	3.47				
25/30-year Aaa	3.30	3.55	3.88				
25/30-year A	4.73	4.87	5.53				
Revenue Bonds (Revs) (25/30-Year)							
Education AA	4.22	4.32	4.56				
Electric AA	4.30	4.63	4.92				
Housing AA	4.67	4.75	5.55				
Hospital AA	4.42	4.57	4.92				
Toll Road Aaa	4.23	4.40	4.58				

Source: Bloomberg Finance L.P.

Federal Reserve Data

BANK RESERVES

(Two-Week Period; in Millions, Not Seasonally Adjusted)

	Recent Levels			Average Levels Over the Last...		
	9/19/12	9/5/12	Change	12 Wks.	26 Wks.	52 Wks.
Excess Reserves	1425100	1450818	-25718	1462603	1471716	1498949
Borrowed Reserves	2007	2516	-509	3670	5115	7331
Net Free/Borrowed Reserves	1423093	1448302	-25209	1458934	1466600	1491618

MONEY SUPPLY

(One-Week Period; in Billions, Seasonally Adjusted)

	Recent Levels			Ann'l Growth Rates Over the Last...		
	9/17/12	9/10/12	Change	3 Mos.	6 Mos.	12 Mos.
M1 (Currency+demand deposits)	2385.8	2373.4	12.4	25.8%	15.7%	12.7%
M2 (M1+savings+small time deposits)	10137.9	10124.1	13.8	8.5%	7.2%	7.1%

Source: United States Federal Reserve Bank

ATTACHMENT D

UNS ENERGY NYSE:UNS

RECENT PRICE **42.20** P/E RATIO **17.4** (Trailing: 16.9) Median: 17.0 RELATIVE P/E RATIO **1.14** DIV'D YLD **4.1%** VALUE LINE

TIMELINESS 3 Lowered 11/11/11
SAFETY 3 New 12/31/04
TECHNICAL 2 Raised 10/26/12
BETA .70 (1.00 = Market)

High: 26.0 20.8 24.9 24.9 34.8 37.5 40.0 34.5 33.3 36.9 39.3 43.0
 Low: 13.8 13.7 16.0 22.9 24.3 29.5 27.6 20.9 22.8 29.0 33.0 35.2

LEGENDS
 1.50 x Dividends p sh
 divided by Interest Rate
 Relative Price Strength
 Options: Yes
 Shaded areas indicate recessions

2015-17 PROJECTIONS

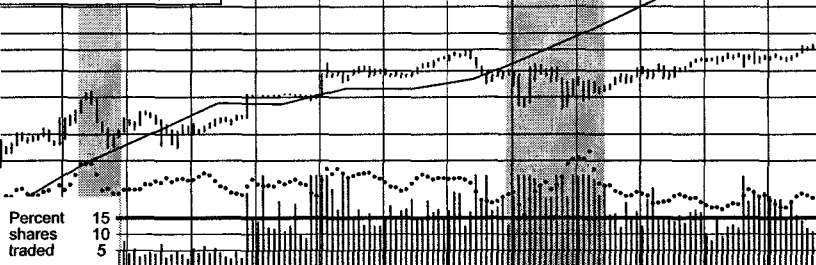
Price Gain Ann'l Total
 High 65 (+55%) 15%
 Low 40 (-5%) 4%

Insider Decisions

D J F M A M J J A
 to Buy 0 0 0 0 0 0 0 0
 Options 1 0 0 0 0 0 0 4
 to Sell 1 0 0 0 0 0 0 3

Institutional Decisions

4Q2011 1Q2012 2Q2012
 to Buy 87 80 97
 to Sell 73 93 78
 Hld's(000) 32564 33499 33380



% TOT. RETURN 9/12
 THIS STOCK VS. ARITH. INDEX
 1 yr. 21.3 28.2
 3 yr. 55.8 42.3
 5 yr. 72.8 29.3

1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	© VALUE LINE PUB. LLC	15-17
22.28	22.71	23.83	24.85	31.12	43.12	25.50	28.71	34.13	35.26	37.42	39.12	39.41	38.89	39.78	40.89	35.20	36.15	Revenues per sh	41.55
6.82	5.29	3.48	3.96	4.23	5.41	4.80	5.20	5.29	5.21	5.68	5.64	4.56	7.82	7.33	7.44	6.25	6.75	"Cash Flow" per sh	7.95
3.76	2.60	.68	1.08	1.27	1.79	.97	1.30	1.31	1.30	1.85	1.55	.39	2.69	2.82	2.75	2.25	2.75	Earnings per sh ^A	3.75
--	--	--	--	.32	.40	.50	.60	.64	.76	.84	.90	.96	1.16	1.56	1.68	1.72	1.76	Div'd Decl'd per sh ^B = †	2.25
2.07	2.22	2.52	2.87	3.19	3.63	3.36	4.06	4.49	5.83	6.77	6.95	9.85	8.01	7.26	10.13	7.95	9.60	Cap'l Spending per sh	11.40
4.15	6.75	7.65	10.02	11.20	12.68	13.05	15.97	16.95	17.68	18.59	19.54	19.16	20.94	22.46	24.07	21.95	22.90	Book Value per sh	27.20
32.13	32.14	32.26	32.35	33.22	33.50	33.58	33.79	34.26	34.87	35.19	35.32	35.46	35.85	36.54	36.92	41.50	41.50	Common Shs Outst'g ^C	41.00
4.3	6.1	23.3	10.8	11.8	10.8	18.2	14.6	18.7	23.9	17.7	22.0	73.8	10.4	11.6	13.3	Bold figures are Value Line estimates		Avg Ann'l P/E Ratio	14.0
.27	.35	1.21	.62	.77	.55	.99	.83	.99	1.27	.96	1.17	4.44	.69	.74	.84			Relative P/E Ratio	.95
--	--	--	--	2.1%	2.1%	2.8%	3.2%	2.6%	2.5%	2.6%	2.6%	3.3%	4.1%	4.8%	4.6%			Avg Ann'l Div'd Yield	4.3%

CAPITAL STRUCTURE as of 6/30/12
 Total Debt \$1900.5 mill. Due in 5 Yrs \$770.0 mill.
 LT Debt \$1386.9 mill. LT Interest \$75.0 mill.
 Incl. \$352.7 mill. capitalized leases.
 (LT interest earned: 3.4x)

Pension Assets-12/11 \$245 mill. **Oblig.** \$319 mill.
Pfd Stock None

Common Stock 41,265,837 shs.
 as of 7/18/12
MARKET CAP: \$1.7 billion (Mid Cap)

	2009	2010	2011
% Change Retail Sales (KWH)	-1.4	-8	+4
Avg. Indust. Use (MWH)	5096	5076	5064
Avg. Indust. Rev. per KWH (¢)	7.00	6.90	7.10
Capacity at Peak (Mw)	3010	3044	3271
Peak Load, Summer (Mw)	2354	2333	2334
Annual Load Factor (%)	N/A	N/A	N/A
% Change Customers (yr-end)	+4	+3	+4

Fixed Charge Cov. (%) 232 268 251

ANNUAL RATES	Past 10 Yrs.	Past 5 Yrs.	Est'd '09-'11
of change (per sh)			
Revenues	2.0%	2.5%	5.0%
"Cash Flow"	5.0%	7.0%	1.0%
Earnings	7.0%	13.0%	5.5%
Dividends	20.0%	14.5%	7.5%
Book Value	7.0%	5.0%	3.0%

Cal-endar	QUARTERLY REVENUES (\$ mill.)				Full Year
	Mar.31	Jun.30	Sep.30	Dec.31	
2009	311.9	337.8	414.2	330.5	1394.4
2010	317.9	337.8	438.8	359.2	1453.7
2011	344.8	369.7	450.9	344.1	1509.5
2012	318.9	367.2	435	338.9	1460
2013	340	345	450	365	1500

Cal-endar	EARNINGS PER SHARE ^A				Full Year
	Mar.31	Jun.30	Sep.30	Dec.31	
2009	.14	.80	1.45	.30	2.69
2010	.52	.65	1.36	.29	2.82
2011	.35	.71	1.46	.22	2.75
2012	.17	.64	1.25	.19	2.25
2013	.35	.70	1.45	.25	2.75

Cal-endar	QUARTERLY DIVIDENDS PAID B = †				Full Year
	Mar.31	Jun.30	Sep.30	Dec.31	
2008	.24	.24	.24	.24	.96
2009	.29	.29	.29	.29	1.16
2010	.39	.39	.39	.39	1.56
2011	.42	.42	.42	.42	1.68
2012	.43	.43	.43		

BUSINESS: UNS Energy Corporation, through its subsidiaries, operates as an electric utility in Arizona. Subsidiaries include Tuscon Electric Power (TEP), UNS Gas, and UNS Electric. TEP segment serves about 404,000 retail customers in southern Arizona and accounted for 77% of '11 net income. Revenue sources: residential, 42%; commercial, 21%; industrial, 34%; other, 3%. Copper mining

UNS Energy reported mixed second-quarter results. Earnings decreased 10% compared to the prior-year figure, to \$0.64 a share. As expected, the bottom line was negatively impacted by UNS Energy's primary subsidiary, Tuscon Electric Power (TEP), and its four-year base-rate freeze, which will end December 1, 2012. On the plus side, earnings were slightly better than expected, as TEP's retail sales were up 4.6% year over year, due to warmer weather.

The process to implement new rates by August 31, 2013 (13 months after its July 2nd filing date) is on track. In August, TEP and the ACC Staff proposed a schedule, indicating that both parties will try to reach a settlement agreement by January, 2013. Recall, TEP filed for \$128 million in annual revenue increases, based on its 2011 test year, and is requesting a 10.75% rate of return. Additionally, its Energy Efficiency Resource Plan is in the works, a three-year pilot program, which would allow UNS to get a return on its investments in energy-efficiency programs. The subsidiary is also requesting a lost fixed-cost recover mechanism (LFCR). This

is largest industry served. Fuels: coal, 92%; gas, 8%. '11 TEP reported depreciation rate: 3.2%. Has 2,004 employees: TEP, 1,391; UNS Gas, 187; UNS Electric, 154; Other, 272. Chmn. & CEO: Paul J. Bonavia. Pres.: David G. Hutchens. Inc.: AZ. Address: 88 E. Broadway Blvd., Tucson, AZ. 85701. Telephone: 520-571-4000. Internet: www.unisourceenergy.com.

would recover nonfuel costs related to energy-efficiency and renewable-energy regulations, which were not accounted for in its 2008 settlement agreement. **Although these rate increases are anticipated to drive earnings in 2013, our short-term outlook remains weak.** TEP's inability to file for rate increases since 2008 has hindered the bottom line, as its rates are based on costs and investments from 2006. We think share earnings for 2012 will contract approximately 18% from the year-ago tally, to \$2.25. That said, the new rates should boost earnings in 2013, to \$2.75 share. Overall, the base-rate hike is intended to promote long-term financial stability, provide an appropriate rate of return, and allow for further investment in its energy-efficiency and renewable-energy initiatives.

UNS Energy's dividend yield of 4.1% is in line with the utility average. Indeed, the company has increased its dividend annually since 2000, and we expect these raises to continue going forward. All told, this issue may interest income-seeking investors.

Michelle Jensen

November 2, 2012

(A) EPS diluted. Excl. nonrecurr. gains (losses): '98, 19¢; '99, 1.35¢; '00, 48¢; '03, \$2.00. Next earnings report due late Feb. Earnings may not sum due to rounding. (B) Div'ds historically paid in early Mar., June, Sept., and Dec. Div'd reinvest. plan avail. † Shareholder invest. plan avail. (C) In millions. (D) Rate base: fair value. Rate allowed on com. eq. in '08: 10.25%; earned on avg. com. eq., '11: 12.4%. Regulatory Climate: Avg.

Company's Financial Strength	B+
Stock's Price Stability	95
Price Growth Persistence	80
Earnings Predictability	35

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UNS ENERGY CORP (NYSE)
ZACKS RANK: 4 - SELL

UNS **40.25** **▲0.16** **(0.40%)** **Vol. 122,489** **15:08 ET**

UNS Energy Corporation is a utility services holding company engaged, through its subsidiaries, in the electric generation and energy delivery business. It operates in three segments: TEP, UNS Gas and UNS Electric. Its TEP segment generates, transmits, and distributes electricity to retail electric customers in southeastern Arizona. This segment also sells electricity to other utilities and power marketing entities. UNS Gas segment distributes gas to retail customers particularly in Mohave, Yavapai, Coconino and Navajo counties in northern Arizona and Santa Cruz County in southeastern Arizona. Its UNS Electric segment transmits and distributes electricity to retail customers in Mohave and Santa Cruz counties. UNS Energy Corporation, formerly known as UniSource Energy Corporation, is headquartered in Tucson, Arizona.


General Information

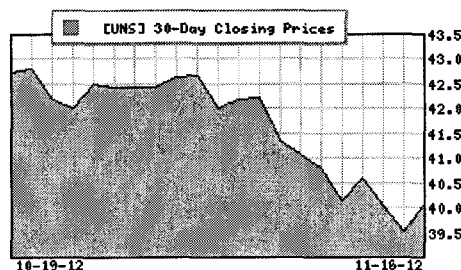
UNS ENERGY CORP
 88 EAST BROADWAY
 TUCSON, AZ 85701
 Phone: 520-571-4000
 Fax: 5207702089
 Web: <http://www.uns.com/>
 Email: cnorman@uns.com

Industry: UTIL-ELEC PWR
 Sector: Utilities

Fiscal Year End: December
 Last Completed Quarter: 09/30/12
 Next EPS Date: 03/04/2013

Price and Volume Information

Zacks Rank 
 Yesterday's Close: 40.09
 52 Week High: 43.12
 52 Week Low: 34.62
 Beta: 0.64
 20 Day Moving Average: 143,152.66
 Target Price Consensus: 44


% Price Change

4 Week: -6.20
 12 Week: 0.07
 YTD: 8.59

% Price Change Relative to S&P 500

4 Week: -1.14
 12 Week: 3.85
 YTD: 0.42

Share Information

Shares Outstanding (millions): 41.27
 Market Capitalization (millions): 1,654.35
 Short Ratio: 6.25
 Last Split Date: 05/20/1996

Dividend Information

Dividend Yield: 4.29%
 Annual Dividend: \$1.72
 Payout Ratio: 0.76
 Change in Payout Ratio: 0.59
 Last Dividend Payout / Amount: 08/31/2012 / \$0.43

EPS Information

Current Quarter EPS Consensus Estimate: 0.17
 Current Year EPS Consensus Estimate: 2.20
 Estimated Long-Term EPS Growth Rate: 6.30
 Next EPS Report Date: 03/04/2013

Consensus Recommendations

Current (1=Strong Buy, 5=Strong Sell): 2.00
 30 Days Ago: 2.00
 60 Days Ago: 2.00
 90 Days Ago: 2.00

Fundamental Ratios

P/E	EPS Growth	Sales Growth
Current FY Estimate: 18.22	vs. Previous Year: -8.82%	vs. Previous Year: -3.03%
Trailing 12 Months: 17.66	vs. Previous Quarter: 93.75%	vs. Previous Quarter: 19.09%

PEG Ratio	2.89				
Price Ratios		ROE		ROA	
Price/Book	1.54	09/30/12	9.37	09/30/12	2.29
Price/Cash Flow	5.34	06/30/12	10.24	06/30/12	2.43
Price / Sales	1.13	03/31/12	11.05	03/31/12	2.52
Current Ratio		Quick Ratio		Operating Margin	
09/30/12	1.59	09/30/12	1.21	09/30/12	6.32
06/30/12	1.06	06/30/12	0.80	06/30/12	6.53
03/31/12	1.04	03/31/12	0.78	03/31/12	6.67
Net Margin		Pre-Tax Margin		Book Value	
09/30/12	10.02	09/30/12	10.02	09/30/12	26.07
06/30/12	11.01	06/30/12	11.01	06/30/12	25.79
03/31/12	11.17	03/31/12	11.17	03/31/12	25.13
Inventory Turnover		Debt-to-Equity		Debt to Capital	
09/30/12	7.24	09/30/12	1.65	09/30/12	62.29
06/30/12	8.24	06/30/12	1.60	06/30/12	61.56
03/31/12	9.15	03/31/12	1.80	03/31/12	64.35

TUCSON ELECTRIC POWER COMPANY
DOCKET NO. E-01933A-12-0291
TABLE OF CONTENTS TO SCHEDULES WAR

<u>SCHEDULE #</u>	
WAR - 1	COST OF CAPITAL SUMMARY
WAR - 2	DCF COST OF EQUITY CAPITAL
WAR - 3	DIVIDEND YIELD CALCULATION
WAR - 4	DIVIDEND GROWTH RATE CALCULATION
WAR - 5	DIVIDEND GROWTH COMPONENTS
WAR - 6	GROWTH RATE COMPARISON
WAR - 7	CAPM COST OF EQUITY CAPITAL
WAR - 8	ECONOMIC INDICATORS - 1990 TO PRESENT
WAR - 9	CAPITAL STRUCTURES OF SAMPLE COMPANIES

ORIGINAL COST WEIGHTED AVERAGE COST OF CAPITAL

LINE NO.	DESCRIPTION	(A) CAPITALIZATION PER COMPANY	(B) RUCO ADJUSTMENTS	(C) RUCO ADJUSTED CAPITALIZATION	(D) CAPITAL RATIO	(E) COST	(F) WEIGHTED COST
1	SHORT-TERM DEBT	\$ 10,000	\$ -	\$ 10,000	0.53%	1.42%	0.01%
2	LONG-TERM DEBT	1,061,389	-	1,061,389	55.97%	5.22%	2.92%
3	COMMON EQUITY	824,983	-	824,983	43.50%	10.00%	4.35%
4	TOTAL CAPITALIZATION	\$ 1,896,372	\$ -	\$ 1,896,372	100.00%		
5	ORIGINAL COST WEIGHTED AVERAGE COST OF CAPITAL						7.28%

REFERENCES:
COLUMN (A): COMPANY SCHEDULE D-1
COLUMN (B): TESTIMONY, WAR
COLUMN (C): COLUMN (A) + COLUMN (B)
COLUMN (D): COLUMN (C) + COLUMN (C), LINE 4
COLUMN (E): LINE 1 - COMPANY SCHEDULE D-1
COLUMN (E): LINE 2 - SCHEDULE WAR-1, PAGE 2
COLUMN (E): LINE 3 - SCHEDULE WAR-1, PAGE 3
COLUMN (F): COLUMN (D) x COLUMN (E)

FAIR VALUE WEIGHTED AVERAGE COST OF CAPITAL

LINE NO.	DESCRIPTION	(A) CAPITALIZATION	(B) RUCO	(C) RUCO ADJUSTED	(D) CAPITAL	(E) COST	(F) WEIGHTED COST
1	SHORT-TERM DEBT	\$ 10,000	\$ -	\$ 10,000	0.53%	1.42%	0.01%
2	LONG-TERM DEBT	1,061,389	-	1,061,389	55.97%	3.03%	1.70%
3	COMMON EQUITY	824,983	-	824,983	43.50%	7.81%	3.40%
4	TOTAL CAPITALIZATION	\$ 1,896,372	\$ -	\$ 1,896,372	100.00%		
5	FAIR VALUE WEIGHTED AVERAGE COST OF CAPITAL						5.11%

REFERENCES:
COLUMN (A): COMPANY SCHEDULE D-1
COLUMN (B): TESTIMONY, WAR
COLUMN (C): COLUMN (A) + COLUMN (B)
COLUMN (D): COLUMN (C) + COLUMN (C), LINE 4
COLUMN (E): LINE 1 - COMPANY SCHEDULE D-1
COLUMN (E): LINE 2 - SCHEDULE WAR-1, PAGE 2
COLUMN (E): LINE 3 - SCHEDULE WAR-1, PAGE 3
COLUMN (F): COLUMN (D) x COLUMN (E)

COST OF LONG-TERM DEBT (000'S)

LINE NO.	DESCRIPTION	(A) BALANCE AS OF DECEMBER 31, 2011	(B) RUCO ADJUSTMENT	(C) RUCO ADJUSTED BALANCE	(D) ANNUAL INTEREST	(E) COST RATE
FIXED RATE TAXABLE BONDS:						
1	5.150% SERIES DUE 2021	\$ 250,000	\$ -	\$ 250,000	\$ 12,875	5.15%
2	TOTAL FIXED RATE TAXABLE BONDS (SUM OF LINE 1)	250,000	-	250,000	12,875	5.15%
FIXED RATE TAX-EXEMPT BONDS:						
3	5.850% 1998 APACHE A	83,700	-	83,700	4,887	
4	5.875% 1998 APACHE B	99,800	-	99,800	5,863	
5	5.850% 1998 APACHE C	16,500	-	16,500	965	
6	6.375% 2008 PINA A	90,745	-	90,745	5,785	
7	5.750% 2008 PINA B	130,000	-	130,000	7,475	
8	4.650% 2009 PINA A (San Juan)	80,410	-	80,410	3,980	
9	5.125% 2009 COCONINO A	14,700	-	14,700	763	
10	5.250% 2010 PINA A	100,000	-	100,000	5,250	
11	TOTAL FIXED RATE TAX-EXEMPT BONDS (SUM OF LINES 3 THROUGH 10)	615,855	-	615,855	34,968	5.68%
VARIABLE RATE TAX-EXEMPT BONDS:						
12	VARIABLE 1982 PINA A IRVINGTON	38,700	-	38,700	832	
13	VARIABLE 1982 PINA A IRVINGTON & FOUR CORNERS	39,900	-	39,900	649	
14	VARIABLE 2010 COCONINO A	100,000	-	100,000	2,799	
15	VARIABLE 1982 PINA A IRVINGTON	36,700	-	36,700	689	
16	TOTAL VARIABLE RATE TAX-EXEMPT BONDS (SUM OF LINES 12 THROUGH 15)	215,300	-	215,300	4,769	2.22%
17	TOTAL LONG-TERM DEBT (SUM OF LINES 2, 11 AND 16)	1,081,155	-	1,081,155	52,612	4.87%
18	UNAMORTIZED DEBT DISCOUNT, PREMIUM AND EXPENSE AND LOSS ON REACQUIRED DEBT	(19,786)	-	(19,786)		
19	AMORTIZATION OF DEBT DISCOUNT AND EXPENSE AND LOSS ON REACQUIRED DEBT				2,378	
20	CREDIT FACILITY COMMITMENT FEES				395	
21	TOTAL LONG-TERM DEBT - NET (SUM OF LINES 17, 18, 19 AND 20)	1,061,369	-	1,061,369	55,385	5.22%
22	COST OF LONG-TERM DEBT - ORIGINAL COST (COLUMN (E), LINE 21)					5.22%
23	LESS: RECOMMENDED FAIR VALUE INFLATION ADJUSTMENT (SCHEDULE WAR 1, PAGE 4, LINE 11)					2.19%
24	COST OF LONG-TERM DEBT - FAIR VALUE (LINE 22 - LINE 23)					3.03%

REFERENCES:

COLUMNS (A): COMPANY SCHEDULE D-2, PAGE 1 OF 2
COLUMN (B): TESTIMONY WAR
COLUMN (C): COLUMN (A) + COLUMN (B)
COLUMNS (D): COMPANY SCHEDULE D-2, PAGE 1 OF 2
COLUMN (E): COLUMN (D), LINES 2, 11, 16, 17 AND 21 / COLUMN (C) LINES 2, 11, 16, 17 AND 21

COST OF COMMON EQUITY ESTIMATE

LINE NO.		
1	<u>DCF METHODOLOGY</u>	
2	DCF - SINGLE-STAGE CONSTANT GROWTH MODEL ESTIMATE	
3	<u>CAPM METHODOLOGY</u>	
4	CAPM - GEOMETRIC MEAN ESTIMATE	
5	CAPM - ARITHMETIC MEAN ESTIMATE	
6	AVERAGE OF CAPM ESTIMATES	9.60%
7	COST OF COMMON EQUITY ESTIMATE - ORIGINAL COST	5.82%
8	LESS: RECOMMENDED FAIR VALUE INFLATION ADJUSTMENT	6.98%
9	COST OF COMMON EQUITY ESTIMATE - FAIR VALUE	6.40%
		10.00%
		2.19%
		7.81%

SCHEDULE WAR-2, COLUMN (C), LINE 10

SCHEDULE WAR-7 PAGE 1, COLUMN (B), LINE 10

SCHEDULE WAR-7 PAGE 2, COLUMN (B), LINE 10

(LINE 4 + LINE 5) / 2

TESTIMONY, WAR

SCHEDULE WAR-1, PAGE 4, COLUMN (D), LINE 11

LINE 8 - LINE 9

INFLATION ADJUSTMENT TO RUCO'S RECOMMENDED ORIGINAL COST OF EQUITY CAPITAL

LINE NO.	(A) YEAR	(B) VALUE TIPS	(C) VALUE BONDS	(D) DIFFERENCE
1	2004	1.83%	4.27%	2.44%
2	2005	1.81%	4.29%	2.48%
3	2006	2.31%	4.54%	2.23%
4	2007	2.29%	4.63%	2.34%
5	2008	1.77%	3.66%	1.89%
6	2009	1.66%	3.26%	1.60%
7	2010	1.15%	3.22%	2.07%
8	2011	0.55%	2.78%	2.23%
9	2012	-0.45%	1.99%	2.44%
10	AVERAGE	1.44%	3.63%	2.19%
11	RECOMMENDED FAIR VALUE INFLATION ADJUSTMENT			2.19%

REFERENCES

COLUMNS (A) THRU (C), LINES 1 THRU 9: FEDERAL RESERVE BANK OF ST. LOUIS WEBSITE
COLUMN (D): COLUMN (C) - COLUMN (D)
COLUMNS (B) THRU (D), LINE 10: AVERAGE OF LINES 1 THRU 9
COLUMN (D), LINE 11: TESTIMONY - WAR

TUCSON ELECTRIC POWER COMPANY
TEST YEAR ENDED DECEMBER 31, 2011
DCF COST OF EQUITY CAPITAL

DOCKET NO. E-01933A-12-0291
SCHEDULE WAR - 2

LINE NO.	STOCK SYMBOL	COMPANY NAME	(A)		(B)		(C)	
			DIVIDEND YIELD		GROWTH RATE (g)	=	DCF COST OF EQUITY CAPITAL	
1	AEP	AMERICAN ELECTRIC POWER COMPANY, INC.	4.40%	+	3.92%	=	8.32%	
2	CNL	CLECO CORPORATION	3.30%	+	5.45%	=	8.75%	
3	EDE	EMPIRE DISTRICT ELECTRIC	4.84%	+	3.07%	=	7.91%	
4	ETR	ENTERGY CORPORATION	4.97%	+	3.55%	=	8.52%	
5	GXP	GREAT PLAINS ENERGY, INC.	4.01%	+	20.69%	=	24.71%	
6	HE	HAWAIIAN ELECTRIC	4.93%	+	4.29%	=	9.23%	
7	IDA	IDACORP, INC.	3.54%	+	5.37%	=	8.91%	
8	NVE	NV ENERGY, INC.	3.71%	+	4.00%	=	7.71%	
9	PNW	PINNACLE WEST CAPITAL CORPORATION	4.25%	+	4.15%	=	8.40%	
10	PNM	PNM RESOURCES, INC.	2.74%	+	4.63%	=	7.38%	
11	POR	PORTLAND GENERAL ELECTRIC COMPANY	4.04%	+	4.03%	=	8.07%	
12	SO	SOUTHERN COMPANY	4.43%	+	4.54%	=	8.97%	
13	WR	WESTAR ENERGY	4.56%	+	3.40%	=	7.96%	
14	AVERAGE							9.60%

REFERENCES:

COLUMN (A): SCHEDULE WAR - 3, COLUMN C

COLUMN (B): SCHEDULE WAR - 4, PAGE 1, COLUMN C

COLUMN (C): COLUMN (A) + COLUMN (B)

TUCSON ELECTRIC POWER COMPANY
TEST YEAR ENDED DECEMBER 31, 2011
DIVIDEND GROWTH RATE CALCULATION

DOCKET NO. E-01933A-12-0291
SCHEDULE WAR - 3

LINE NO.	STOCK SYMBOL	COMPANY NAME	(A) ESTIMATED DIVIDEND (PER SHARE)	(B) AVERAGE STOCK PRICE (PER SHARE)	(C) DIVIDEND YIELD
1	AEP	AMERICAN ELECTRIC POWER COMPANY, INC.	\$ 1.88	/ \$ 42.77	= 4.40%
2	CNL	CLECO CORPORATION	1.35	/ 40.87	= 3.30%
3	EDE	EMPIRE DISTRICT ELECTRIC	1.00	/ 20.67	= 4.84%
4	ETR	ENTERGY CORPORATION	3.32	/ 66.75	= 4.97%
5	GXP	GREAT PLAINS ENERGY, INC.	0.85	/ 21.19	= 4.01%
6	HE	HAWAIIAN ELECTRIC	1.24	/ 25.13	= 4.93%
7	IDA	IDACORP, INC.	1.52	/ 42.95	= 3.54%
8	NVE	NV ENERGY, INC.	0.68	/ 18.33	= 3.71%
9	PNW	PINNACLE WEST CAPITAL CORPORATION	2.18	/ 51.28	= 4.25%
10	PNM	PNM RESOURCES, INC.	0.58	/ 21.13	= 2.74%
11	POR	PORTLAND GENERAL ELECTRIC COMPANY	1.08	/ 26.72	= 4.04%
12	SO	SOUTHERN COMPANY	1.96	/ 44.26	= 4.43%
13	WR	WESTAR ENERGY	1.32	/ 28.93	= 4.56%
14	AVERAGE				

4.13%

REFERENCES:

COLUMN (A): TESTIMONY, WAR
COLUMN (B): SCHEDULE WAR - 4, PAGE 2, COLUMN C
COLUMN (C): COLUMN (A) + COLUMN (B)

**TUCSON ELECTRIC POWER COMPANY
TEST YEAR ENDED DECEMBER 31, 2011
DIVIDEND GROWTH RATE CALCULATION**

**DOCKET NO. E-01933A-12-0291
SCHEDULE WAR - 4
PAGE 1 OF 2**

LINE NO.	STOCK SYMBOL	COMPANY NAME	(A)		(B)		(C)	
			INTERNAL GROWTH (br)	+	EXTERNAL GROWTH (sv)	=	DIVIDEND GROWTH (g)	=
1	AEP	AMERICAN ELECTRIC POWER COMPANY, INC.	3.80%	+	0.12%	=	3.92%	
2	CNL	CLECO CORPORATION	5.20%	+	0.25%	=	5.45%	
3	EDE	EMPIRE DISTRICT ELECTRIC	3.00%	+	0.07%	=	3.07%	
4	ETR	ENTERGY CORPORATION	3.50%	+	0.05%	=	3.55%	
5	GXP	GREAT PLAINS ENERGY, INC.	2.80%	+	17.89%	=	20.69%	
6	HE	HAWAIIAN ELECTRIC	3.00%	+	1.29%	=	4.29%	
7	IDA	IDACORP, INC.	5.25%	+	0.12%	=	5.37%	
8	NVE	NV ENERGY, INC.	4.00%	+	0.00%	=	4.00%	
9	PNW	PINNACLE WEST CAPITAL CORPORATION	3.80%	+	0.35%	=	4.15%	
10	PNM	PNM RESOURCES, INC.	4.60%	+	0.03%	=	4.63%	
11	POR	PORTLAND GENERAL ELECTRIC COMPANY	4.00%	+	0.03%	=	4.03%	
12	SO	SOUTHERN COMPANY	3.90%	+	0.64%	=	4.54%	
13	WR	WESTAR ENERGY	3.25%	+	0.15%	=	3.40%	
14	AVERAGE							5.47%

REFERENCES:

COLUMN (A): TESTIMONY, WAR
COLUMN (B): SCHEDULE WAR - 4, PAGE 2, COLUMN C
COLUMN (C): COLUMN (A) + COLUMN (B)

**TUCSON ELECTRIC POWER COMPANY
TEST YEAR ENDED DECEMBER 31, 2011
DIVIDEND GROWTH RATE CALCULATION**

**DOCKET NO. E-01933A-12-0291
SCHEDULE WAR - 4
PAGE 2 OF 2**

LINE NO.	STOCK SYMBOL	COMPANY NAME	(A)	(B)	(C)
			SHARE GROWTH x { [((M + B) + 1) + 2] - 1 } =	EXTERNAL GROWTH (sv)	
1	AEP	AMERICAN ELECTRIC POWER COMPANY, INC.	0.70%	x { [((1.35) + 1) + 2] - 1 } =	0.12%
2	CNL	CLECO CORPORATION	0.75%	x { [((1.66) + 1) + 2] - 1 } =	0.25%
3	EDE	EMPIRE DISTRICT ELECTRIC	0.60%	x { [((1.23) + 1) + 2] - 1 } =	0.07%
4	ETR	ENTERGY CORPORATION	0.30%	x { [((1.30) + 1) + 2] - 1 } =	0.05%
5	GXP	GREAT PLAINS ENERGY, INC.	9.00%	x { [((0.98) + 1) + 2] + 1 } =	17.89%
6	HE	HAWAIIAN ELECTRIC	4.90%	x { [((1.53) + 1) + 2] - 1 } =	1.29%
7	IDA	IDACORP, INC.	1.10%	x { [((1.22) + 1) + 2] - 1 } =	0.12%
8	NVE	NV ENERGY, INC.	0.01%	x { [((1.22) + 1) + 2] - 1 } =	0.00%
9	PNW	PINNACLE WEST CAPITAL CORPORATION	1.70%	x { [((1.41) + 1) + 2] - 1 } =	0.35%
10	PNM	PNM RESOURCES, INC.	1.30%	x { [((1.05) + 1) + 2] - 1 } =	0.03%
11	POR	PORTLAND GENERAL ELECTRIC COMPANY	0.30%	x { [((1.17) + 1) + 2] - 1 } =	0.03%
12	SO	SOUTHERN COMPANY	1.15%	x { [((2.11) + 1) + 2] - 1 } =	0.64%
13	WR	WESTAR ENERGY	1.30%	x { [((1.23) + 1) + 2] - 1 } =	0.15%
14	AVERAGE				1.61%

REFERENCES:

COLUMN (A): TESTIMONY, WAR

COLUMN (B): VALUE LINE INVESTMENT SURVEY - RATINGS & REPORTS DATED 09/21/2012, 11/02/2012 AND 11/23/2012

COLUMN (C): COLUMN (A) x COLUMN (B)

TUCSON ELECTRIC POWER COMPANY
TEST YEAR ENDED DECEMBER 31, 2011
DIVIDEND GROWTH COMPONENTS

DOCKET NO. E-01933A-12-0291
SCHEDULE WAR - 5
PAGE 1 OF 4

LINE NO.	STOCK SYMBOL	COMPANY NAME	OPERATING PERIOD	(A) RETENTION RATIO (b)	(B) RETURN ON BOOK EQUITY (f) =	(C) DIVIDEND GROWTH (g)	(D) BOOK VALUE (\$/SHARE)	(E) SHARES OUTST. (MILLIONS)	(F) SHARE GROWTH
1	AEP	AMERICAN ELECTRIC POWER COMPANY, INC.	2007	0.4476	11.40%	5.10%	25.17	400.43	
2			2008	0.4515	11.30%	5.10%	26.33	406.07	
3			2009	0.4478	10.40%	4.66%	27.49	478.05	
4			2010	0.3423	9.10%	3.12%	28.33	480.81	
5			2011	0.4089	10.30%	4.21%	30.33	483.42	
6			GROWTH 2007 - 2011			4.27%	5.00%		4.82%
7			2012	0.3871	10.00%	3.87%		486.00	0.53%
8			2013	0.3677	9.50%	3.49%		489.00	0.58%
9			2015-17	0.3857	9.50%	3.66%	4.00%	500.00	0.68%
10									
11	CNL	CLECO CORPORATION	2007	0.3182	7.80%	2.48%	16.85	59.94	
12			2008	0.4706	9.60%	4.52%	17.65	60.04	
13			2009	0.4886	9.50%	4.64%	18.50	60.26	
14			2010	0.5721	10.60%	6.06%	21.76	60.53	
15			2011	0.5676	11.10%	6.30%	23.55	60.29	
16			GROWTH 2007 - 2011			4.49%	10.00%		0.15%
17			2012	0.5000	10.50%	5.25%		61.00	1.18%
18			2013	0.4510	10.00%	4.51%		61.00	0.59%
19			2015-17	0.4154	11.50%	4.78%	6.00%	61.00	0.23%
20									
21	EDE	EMPIRE DISTRICT ELECTRIC	2007	-0.1743	6.20%	NMF	16.04	33.61	
22			2008	-0.0940	7.50%	NMF	15.56	33.98	
23			2009	-0.0847	6.90%	NMF	15.75	38.11	
24			2010	-0.0940	7.20%	NMF	15.82	41.58	
25			2011	0.5115	7.90%	4.04%	16.53	41.98	
26			GROWTH 2007 - 2011			4.04%	1.00%		5.72%
27			2012	0.2000	7.50%	1.50%		42.25	0.64%
28			2013	0.2857	8.00%	2.29%		42.50	0.62%
29			2015-17	0.3143	9.00%	2.83%	2.50%	43.25	0.60%
30									
31	ETR	ENTERGY CORPORATION	2007	0.5393	14.40%	7.77%	40.71	193.12	
32			2008	0.5161	15.30%	7.90%	42.07	189.36	
33			2009	0.5238	14.30%	7.49%	45.54	189.12	
34			2010	0.5135	14.70%	7.55%	47.53	178.75	
35			2011	0.5603	15.00%	8.40%	50.81	176.36	
36			GROWTH 2007 - 2011			7.82%	4.50%		-2.24%
37			2012	0.3615	10.00%	3.62%		177.00	0.36%
38			2013	0.2539	9.00%	2.29%		171.00	-1.53%
39			2015-17	0.3200	9.00%	2.88%	3.00%	171.00	-0.62%

REFERENCES:

COLUMNS (A) & (B): VALUE LINE INVESTMENT SURVEY - RATINGS & REPORTS

DATED 09/21/2012, 11/02/2012 AND 11/23/2012

COLUMN (C): COLUMN (A) x COLUMN (B)

COLUMN (C): LINES 6, 16, 26 & 36; SIMPLE AVERAGE GROWTH, 2007 - 2011

COLUMN (D): VALUE LINE INVESTMENT SURVEY

COLUMN (D): LINES 6, 16, 26 & 36; COMPOUND GROWTH RATE

COLUMN (E): VALUE LINE INVESTMENT SURVEY

COLUMN (F): COMPOUND GROWTH RATES OF DATES SHOWN

TUCSON ELECTRIC POWER COMPANY
TEST YEAR ENDED DECEMBER 31, 2011
DIVIDEND GROWTH COMPONENTS

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LINE NO.	STOCK SYMBOL	LOCAL DISTRIBUTION COMPANY NAME	OPERATING PERIOD	(A) RETENTION RATIO (b)	(B) RETURN ON BOOK EQUITY (f) =	(C) DIVIDEND GROWTH (g)	(D) BOOK VALUE (\$SHARE)	(E) SHARES OUTST. (MILLIONS)	(F) SHARE GROWTH
1	GXP	GREAT PLAINS ENERGY, INC.	2007	0.1075	10.10%	1.09%	18.18	86.23	
2			2008	-0.4310	4.60%	NMF	21.39	119.26	
3			2009	0.1942	4.80%	0.93%	20.62	135.42	
4			2010	0.4575	7.30%	3.34%	21.26	135.71	
5			2011	0.3280	5.80%	1.90%	21.74	136.14	
6			GROWTH 2007 - 2011			1.82%	5.50%		12.09%
7			2012	0.3630	6.00%	2.18%		153.50	12.75%
8			2013	0.3714	6.50%	2.41%		153.50	6.18%
9			2015-17	0.3714	7.50%	2.79%	2.00%	153.50	2.43%
10									
11	HE	HAWAIIAN ELECTRIC	2007	-0.1171	7.20%	NMF	15.29	83.43	
12			2008	-0.1589	6.50%	NMF	15.35	90.52	
13			2009	-0.3626	5.80%	NMF	15.58	92.52	
14			2010	-0.0248	7.70%	NMF	15.67	94.69	
15			2011	0.1389	9.00%	1.25%	15.95	96.04	
16			GROWTH 2007 - 2011			1.25%	1.50%		3.58%
17			2012	0.2250	10.00%	2.25%		98.00	2.04%
18			2013	0.2706	9.50%	2.57%		104.00	4.06%
19			2015-17	0.3000	10.00%	3.00%	4.50%	122.00	4.90%
20									
21	IDA	IDACORP, INC.	2007	0.3548	6.80%	2.41%	26.79	45.06	
22			2008	0.4495	7.60%	3.42%	27.76	46.92	
23			2009	0.5455	8.90%	4.85%	29.17	47.90	
24			2010	0.5932	9.30%	5.52%	31.01	49.41	
25			2011	0.6429	10.10%	6.49%	33.19	49.95	
26			GROWTH 2007 - 2011			4.54%	5.00%		2.61%
27			2012	0.5848	9.50%	5.56%		50.00	0.10%
28			2013	0.5323	8.50%	4.52%		50.00	0.05%
29			2015-17	0.4412	8.50%	3.75%	4.00%	53.00	1.19%
30									
31	NVE	NV ENERGY, INC.	2007	0.8202	6.60%	5.41%	12.82	233.74	
32			2008	0.6180	6.70%	4.14%	13.36	234.32	
33			2009	0.4744	5.70%	2.70%	13.73	234.83	
34			2010	0.5313	6.80%	3.61%	14.24	235.32	
35			2011	0.2899	4.80%	1.39%	14.43	236.00	
36			GROWTH 2007 - 2011			3.45%	4.00%		0.24%
37			2012	0.4880	8.50%	4.15%		236.00	0.00%
38			2013	0.4080	8.00%	3.26%		236.00	0.00%
39			2015-17	0.3333	9.00%	3.00%	3.50%	236.00	0.00%

REFERENCES:

COLUMNS (A) & (B): VALUE LINE INVESTMENT SURVEY - RATINGS & REPORTS

DATED 09/21/2012, 11/02/2012 AND 11/23/2012

COLUMN (C): COLUMN (A) x COLUMN (B)

COLUMN (D): LINES 6, 16, 26 & 36, SIMPLE AVERAGE GROWTH, 2007 - 2011

COLUMN (D): VALUE LINE INVESTMENT SURVEY

COLUMN (D): LINES 6, 16, 26 & 36, COMPOUND GROWTH RATE

COLUMN (E): VALUE LINE INVESTMENT SURVEY

COLUMN (F): COMPOUND GROWTH RATES OF DATES SHOWN

TUCSON ELECTRIC POWER COMPANY
TEST YEAR ENDED DECEMBER 31, 2011
DIVIDEND GROWTH COMPONENTS

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SCHEDULE WAR - 5
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LINE NO.	STOCK SYMBOL	LOCAL DISTRIBUTION COMPANY NAME	OPERATING PERIOD	(A) RETENTION RATIO (b)	(B) RETURN ON BOOK EQUITY (c) =	(C) DIVIDEND GROWTH (g)	(D) BOOK VALUE (\$/SHARE)	(E) SHARES OUTST. (MILLIONS)	(F) SHARE GROWTH
1	PNW	PINNACLE WEST CAPITAL CORPORATION	2007	0.2905	8.50%	2.47%	35.15	100.49	
2			2008	0.0094	6.20%	0.06%	34.16	100.89	
3			2009	0.0708	6.90%	0.49%	32.69	101.43	
4			2010	0.3182	9.00%	2.86%	33.86	108.77	
5			2011	0.2977	8.60%	2.56%	34.98	109.25	
6			GROWTH 2007 - 2011			1.69%	-		2.11%
7			2012	0.3855	9.50%	3.66%		110.00	0.69%
8			2013	0.3714	9.50%	3.53%		111.00	0.80%
9			2015-17	0.3467	9.00%	3.12%	35.00%	118.50	1.64%
10									
11	PNM	PNM RESOURCES, INC.	2007	-0.1974	3.50%	NMF	22.03	76.81	
12			2008	-4.5455	0.50%	NMF	18.89	86.53	
13			2009	0.1379	3.20%	0.44%	18.90	86.67	
14			2010	0.4253	5.20%	2.21%	17.60	86.67	
15			2011	0.5370	6.10%	3.28%	19.62	79.65	
16			GROWTH 2007 - 2011			1.98%	-1.00%		0.91%
17			2012	0.5538	6.00%	3.32%		80.00	0.44%
18			2013	0.5000	7.00%	3.50%		80.00	0.22%
19			2015-17	0.5122	9.00%	4.61%	3.00%	85.00	1.31%
20									
21	POR	PORTLAND GENERAL ELECTRIC COMPANY	2007	0.6009	11.00%	6.61%	21.05	62.53	
22			2008	0.3022	6.40%	1.93%	21.64	62.58	
23			2009	0.2290	6.20%	1.42%	20.50	75.21	
24			2010	0.3735	7.90%	2.95%	21.14	75.32	
25			2011	0.4564	8.80%	4.02%	22.07	75.36	
26			GROWTH 2007 - 2011			3.39%	2.00%		4.78%
27			2012	0.4316	8.00%	3.45%		75.55	0.25%
28			2013	0.4308	8.00%	3.45%		75.75	0.26%
29			2015-17	0.4444	9.00%	4.00%	3.50%	76.50	0.30%
30									
31	SO	SOUTHERN COMPANY	2007	0.2982	14.00%	4.18%	16.23	763.10	
32			2008	0.2622	13.10%	3.44%	17.08	777.19	
33			2009	0.2543	12.40%	3.15%	18.15	819.65	
34			2010	0.2373	12.20%	2.89%	19.21	843.34	
35			2011	0.2667	12.50%	3.33%	20.32	865.13	
36			GROWTH 2007 - 2011			3.40%	6.00%		3.19%
37			2012	0.2679	12.50%	3.35%		868.00	0.33%
38			2013	0.2786	13.00%	3.62%		870.00	0.28%
39			2015-17	0.3077	12.50%	3.85%	5.00%	915.00	1.13%

REFERENCES:

COLUMNS (A) & (B): VALUE LINE INVESTMENT SURVEY - RATINGS & REPORTS

DATED 09/21/2012, 11/02/2012 AND 11/23/2012

COLUMN (C): COLUMN (A) x COLUMN (B)

COLUMN (C): LINES 6, 16, 26 & 36, SIMPLE AVERAGE GROWTH, 2007 - 2011

COLUMN (D): VALUE LINE INVESTMENT SURVEY

COLUMN (D): LINES 6, 16, 26 & 36, COMPOUND GROWTH RATE

COLUMN (E): VALUE LINE INVESTMENT SURVEY

COLUMN (F): COMPOUND GROWTH RATES OF DATES SHOWN

TUCSON ELECTRIC POWER COMPANY
TEST YEAR ENDED DECEMBER 31, 2011
DIVIDEND GROWTH COMPONENTS

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SCHEDULE WAR - 5
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LINE NO.	STOCK SYMBOL	LOCAL DISTRIBUTION COMPANY NAME	OPERATING PERIOD	(A) RETENTION RATIO (b)	(B) RETURN ON BOOK EQUITY (f) =	(C) DIVIDEND GROWTH (g)	(D) BOOK VALUE (\$/SHARE)	(E) SHARES OUTST. (MILLIONS)	(F) SHARE GROWTH
1	WR	WESTAR ENERGY	2007	0.4130	9.20%	3.80%	19.14	95.46	
2			2008	0.1145	6.20%	0.71%	20.18	108.31	
3			2009	0.0625	6.30%	0.39%	20.59	109.07	
4			2010	0.3111	8.50%	2.64%	21.25	112.13	
5			2011	0.2849	7.70%	2.19%	22.20	125.70	
6			GROWTH 2007 - 2011			1.95%	6.00%		7.12%
7			2012	0.3231	8.50%	2.75%		127.00	1.03%
8			2013	0.3366	8.00%	2.69%		128.00	0.91%
9			2015-17	0.3833	8.50%	3.26%	5.00%	134.00	1.29%

REFERENCES:

COLUMNS (A) & (B): VALUE LINE INVESTMENT SURVEY - RATINGS & REPORTS

DATED 09/21/2012, 11/02/2012 AND 11/23/2012

COLUMN (C): COLUMN (A) x COLUMN (B)

COLUMN (C): LINE 6, SIMPLE AVERAGE GROWTH, 2007 - 2011

COLUMN (D): VALUE LINE INVESTMENT SURVEY

COLUMN (D): LINE 6, COMPOUND GROWTH RATE

COLUMN (E): VALUE LINE INVESTMENT SURVEY

COLUMN (F): COMPOUND GROWTH RATES OF DATES SHOWN

TUCSON ELECTRIC POWER COMPANY
TEST YEAR ENDED DECEMBER 31, 2011
GROWTH RATE COMPARISON

DOCKET NO. E-01933A-12-0291
SCHEDULE WAR - 6

LINE NO.	STOCK SYMBOL	COMPANY NAME	(A)		(B)		(C)		(D)		(E)		(F)	
			(br) + (sv)		ZACKS		VALUE LINE PROJECTED		VALUE LINE HISTORIC		VALUE LINE & ZACKS AVGS.		5 - YEAR COMPOUND HISTORY	
					EPS		EPS	DPS	BVPS	EPS	DPS	BVPS	EPS	DPS
1	AEP	AMERICAN ELECTRIC POWER COMPANY, INC.	3.92%		3.50%		3.00%	3.50%	4.00%	1.50%	4.00%	5.00%	2.28%	4.02%
2	CNL	CLECO CORPORATION	5.45%		3.00%		6.50%	11.50%	6.00%	10.00%		10.00%	18.35%	5.62%
3	EDE	EMPIRE DISTRICT ELECTRIC	3.07%		-		6.00%	2.00%	2.50%	3.00%		1.00%	4.70%	-15.91%
4	ETR	ENTERGY CORPORATION	3.55%		-1.50%		-5.00%	1.00%	3.00%	8.50%		4.50%	7.76%	6.51%
5	GXP	GREAT PLAINS ENERGY, INC.	20.69%		8.20%		5.50%	5.00%	2.00%	-9.50%		5.50%	-9.46%	-15.66%
6	HE	HAWAIIAN ELECTRIC	4.29%		7.00%		9.00%	2.00%	4.50%	-3.00%		1.50%	6.72%	0.00%
7	IDA	IDACORP, INC.	5.37%		4.00%		2.00%	8.00%	4.00%	8.50%		5.00%	15.93%	0.00%
8	NVE	NV ENERGY, INC.	4.00%		15.10%		11.00%	14.00%	3.50%	4.00%		4.00%	-6.17%	32.29%
9	PNW	PINNACLE WEST CAPITAL CORPORATION	4.15%		6.00%		5.00%	2.50%	35.00%	1.00%		-	0.25%	0.00%
10	PNM	PNM RESOURCES, INC.	4.63%		8.20%		16.00%	12.00%	3.00%	-12.00%		-1.00%	9.18%	-13.90%
11	POR	PORTLAND GENERAL ELECTRIC COMPANY	4.03%		4.10%		5.50%	3.50%	3.50%	8.50%		2.00%	-4.35%	3.33%
12	SO	SOUTHERN COMPANY	4.54%		5.20%		5.00%	4.00%	5.00%	3.00%		6.00%	2.84%	3.98%
13	WR	WESTAR ENERGY	3.40%		5.70%		6.50%	3.00%	5.00%	1.00%		6.00%	-0.69%	4.34%
14							5.85%	5.54%	6.23%	1.88%		4.13%	3.64%	1.12%
15	AVERAGES		5.47%		5.71%			5.87%		2.11%		4.47%		2.66%

REFERENCES:

COLUMN (A): SCHEDULE WAR - 4, PAGE 1, COLUMN C
COLUMN (B): ZACKS INVESTMENT RESEARCH (www.zacks.com)
COLUMN (C): VALUE LINE INVESTMENT SURVEY - RATINGS & REPORTS DATED 09/21/2012, 11/02/2012 AND 11/23/2012
COLUMN (D): VALUE LINE INVESTMENT SURVEY - RATINGS & REPORTS DATED 09/21/2012, 11/02/2012 AND 11/23/2012
COLUMN (E): SIMPLE AVERAGE OF COLUMNS (B) THRU (D) LINES 1 THROUGH 20
COLUMN (F): 5-YEAR ANNUAL GROWTH RATE CALCULATED WITH DATA COMPILED FROM VALUE LINE INVESTMENT SURVEY
- RATINGS & REPORTS DATED 09/21/2012, 11/02/2012 AND 11/23/2012

TUCSON ELECTRIC POWER COMPANY
TEST YEAR ENDED DECEMBER 31, 2011
CAPM COST OF EQUITY CAPITAL

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SCHEDULE WAR - 7
PAGE 1 OF 2

BASED ON A GEOMETRIC MEAN:

LINE NO.	STOCK SYMBOL	COMPANY NAME	(A)				(B) EXPECTED RETURN
			k =	r _f	+ [β	x (r _m - r _f)] =	
1	AEP	AMERICAN ELECTRIC POWER COMPANY, INC.	k =	2.86%	+ [0.70 x (9.80% - 5.70%)] =	5.73%
2	CNL	CLECO CORPORATION	k =	2.86%	+ [0.65 x (9.80% - 5.70%)] =	5.52%
3	EDE	EMPIRE DISTRICT ELECTRIC	k =	2.86%	+ [0.65 x (9.80% - 5.70%)] =	5.52%
4	ETR	ENTERGY CORPORATION	k =	2.86%	+ [0.70 x (9.80% - 5.70%)] =	5.73%
5	GXP	GREAT PLAINS ENERGY, INC.	k =	2.86%	+ [0.75 x (9.80% - 5.70%)] =	5.93%
6	HE	HAWAIIAN ELECTRIC	k =	2.86%	+ [0.70 x (9.80% - 5.70%)] =	5.73%
7	IDA	IDACORP, INC.	k =	2.86%	+ [0.70 x (9.80% - 5.70%)] =	5.73%
8	NVE	NV ENERGY, INC.	k =	2.86%	+ [0.85 x (9.80% - 5.70%)] =	6.34%
9	PNW	PINNACLE WEST CAPITAL CORPORATION	k =	2.86%	+ [0.70 x (9.80% - 5.70%)] =	5.73%
10	PNM	PNM RESOURCES, INC.	k =	2.86%	+ [0.95 x (9.80% - 5.70%)] =	6.75%
11	POR	PORTLAND GENERAL ELECTRIC COMPANY	k =	2.86%	+ [0.75 x (9.80% - 5.70%)] =	5.93%
12	SO	SOUTHERN COMPANY	k =	2.86%	+ [0.55 x (9.80% - 5.70%)] =	5.11%
13	WR	WESTAR ENERGY	k =	2.86%	+ [0.75 x (9.80% - 5.70%)] =	5.93%
14	AVERAGE					0.72	5.82%

REFERENCES:

COLUMN (A): SHARPE LITNER CAPITAL ASSET PRICING MODEL ("CAPM") FORMULA

$$k = r_f + [\beta (r_m - r_f)]$$

WHERE:

k = THE EXPECTED RETURN ON A GIVEN SECURITY

r_f = RATE OF RETURN ON A RISK FREE ASSET PROXY (a)

β = THE BETA COEFFICIENT OF A GIVEN SECURITY

r_m = PROXY FOR THE MARKET RATE OF RETURN (b)

r_f = PROXY FOR THE RISK FREE RATE ON LONG-TERM TREASURIES (b)

COLUMN (B): EXPECTED RATE OF RETURN USING THE CAPM FORMULA

NOTES

(a) AN 8-WEEK AVERAGE OF THE YIELD ON A 30-YEAR U.S. TREASURY INSTRUMENT THAT APPEARED IN VALUE LINE INVESTMENT SURVEY'S "SELECTION & OPINIONS" PUBLICATION FROM 10/12/2012 THROUGH 11/30/2012 WAS USED AS A RISK FREE RATE OF RETURN.

(b) THE RISK PREMIUM (RM - RF) USED THE GEOMETRIC MEAN FOR S&P 500 TOTAL RETURNS OVER THE 1926 - 2011 PERIOD MINUS TOTAL RETURNS ON LONG-TERM TREASURIES DURING THE SAME PERIOD. THE DATA WAS OBTAINED FROM MORNINGSTAR'S STOCKS, BONDS, BILLS AND INFLATION: 2012 YEARBOOK.

BASED ON AN ARITHMETIC MEAN:

LINE NO.	STOCK SYMBOL	COMPANY NAME	(A)			(B) EXPECTED RETURN
			$k = r_f + [\beta \times (r_m - r_f)]$			
1	AEP	AMERICAN ELECTRIC POWER COMPANY, INC.	$k = 2.86\% + [0.70 \times (11.80\% - 6.10\%)]$			6.85%
2	CNL	CLECO CORPORATION	$k = 2.86\% + [0.65 \times (11.80\% - 6.10\%)]$			6.56%
3	EDE	EMPIRE DISTRICT ELECTRIC	$k = 2.86\% + [0.65 \times (11.80\% - 6.10\%)]$			6.56%
4	ETR	ENTERGY CORPORATION	$k = 2.86\% + [0.70 \times (11.80\% - 6.10\%)]$			6.85%
5	GXP	GREAT PLAINS ENERGY, INC.	$k = 2.86\% + [0.75 \times (11.80\% - 6.10\%)]$			7.13%
6	HE	HAWAIIAN ELECTRIC	$k = 2.86\% + [0.70 \times (11.80\% - 6.10\%)]$			6.85%
7	IDA	IDACORP, INC.	$k = 2.86\% + [0.70 \times (11.80\% - 6.10\%)]$			6.85%
8	NVE	NV ENERGY, INC.	$k = 2.86\% + [0.85 \times (11.80\% - 6.10\%)]$			7.70%
9	PNW	PINNACLE WEST CAPITAL CORPORATION	$k = 2.86\% + [0.70 \times (11.80\% - 6.10\%)]$			6.85%
10	PNM	PNM RESOURCES, INC.	$k = 2.86\% + [0.95 \times (11.80\% - 6.10\%)]$			8.27%
11	POR	PORTLAND GENERAL ELECTRIC COMPANY	$k = 2.86\% + [0.75 \times (11.80\% - 6.10\%)]$			7.13%
12	SO	SOUTHERN COMPANY	$k = 2.86\% + [0.55 \times (11.80\% - 6.10\%)]$			5.99%
13	WR	WESTAR ENERGY	$k = 2.86\% + [0.75 \times (11.80\% - 6.10\%)]$			7.13%
14	AVERAGE		<u>0.72</u>			<u>6.98%</u>

REFERENCES:

COLUMN (A): SHARPE LITNER CAPITAL ASSET PRICING MODEL ("CAPM") FORMULA

$$k = r_f + [\beta (r_m - r_f)]$$

WHERE:

k = THE EXPECTED RETURN ON A GIVEN SECURITY

r_f = RATE OF RETURN ON A RISK FREE ASSET PROXY (a)

β = THE BETA COEFFICIENT OF A GIVEN SECURITY

r_m = PROXY FOR THE MARKET RATE OF RETURN (b)

r_f = PROXY FOR THE RISK FREE RATE ON LONG-TERM TREASURIES (b)

COLUMN (B): EXPECTED RATE OF RETURN USING THE CAPM FORMULA

NOTES

(a) AN 8-WEEK AVERAGE OF THE YIELD ON A 30-YEAR U.S. TREASURY INSTRUMENT THAT APPEARED IN VALUE LINE INVESTMENT SURVEY'S "SELECTION & OPINIONS" PUBLICATION FROM 10/12/2012 THROUGH 11/30/2012 WAS USED AS A RISK FREE RATE OF RETURN.

(b) THE RISK PREMIUM (RM - RF) USED THE ARITHMETIC MEAN FOR S&P 500 TOTAL RETURNS OVER THE 1926 - 2011 PERIOD MINUS TOTAL RETURNS ON LONG-TERM TREASURIES DURING THE SAME PERIOD. THE DATA WAS OBTAINED FROM MORNINGSTAR'S STOCKS, BONDS, BILLS AND INFLATION: 2012 YEARBOOK.

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SCHEDULE WAR - 8

TUCSON ELECTRIC POWER COMPANY
TEST YEAR ENDED DECEMBER 31, 2011
ECONOMIC INDICATORS - 1990 TO PRESENT

LINE NO.	YEAR	(A) CHANGE IN CPI	(B) CHANGE IN GDP (1996 \$)	(C) PRIME RATE	(D) FED. DISC. RATE	(E) FED. FUNDS RATE	(F) 91-DAY T-BILLS	(G) 30-YR T-BONDS	(H) A-RATED UTIL. BOND YIELD	(I) Baa-RATED UTIL. BOND YIELD
1	1990	5.39%	1.90%	10.01%	6.98%	8.10%	7.50%	7.49%	9.86%	10.06%
2	1991	4.28%	-0.20%	8.46%	5.45%	5.69%	5.38%	5.38%	9.36%	9.55%
3	1992	3.03%	3.30%	6.25%	3.25%	3.52%	3.43%	3.43%	8.69%	8.86%
4	1993	2.96%	2.70%	6.00%	3.00%	3.02%	3.00%	3.00%	7.59%	7.91%
5	1994	2.61%	4.00%	7.14%	3.60%	4.21%	4.25%	4.25%	8.31%	8.63%
6	1995	2.81%	2.50%	8.83%	5.21%	5.83%	5.49%	5.49%	7.89%	8.29%
7	1996	2.93%	3.70%	8.27%	5.02%	5.30%	5.01%	5.01%	7.75%	8.17%
8	1997	2.34%	4.50%	8.44%	5.00%	5.46%	5.06%	5.06%	7.60%	8.12%
9	1998	1.55%	4.20%	8.35%	4.92%	5.35%	4.78%	4.78%	7.04%	7.27%
10	1999	2.19%	4.50%	7.99%	4.62%	4.97%	4.64%	4.64%	7.62%	7.88%
11	2000	3.38%	3.70%	9.23%	5.73%	6.24%	5.82%	5.82%	8.24%	8.36%
12	2001	2.83%	0.80%	6.92%	3.41%	3.88%	3.40%	5.95%	7.59%	8.02%
13	2002	1.59%	1.60%	4.67%	1.17%	1.67%	1.61%	5.38%	7.41%	7.98%
14	2003	2.27%	2.50%	4.12%	2.03%	1.13%	1.01%	4.92%	6.18%	6.64%
15	2004	2.68%	3.60%	4.34%	2.34%	1.35%	1.37%	5.03%	5.77%	6.20%
16	2005	3.39%	2.90%	6.16%	4.19%	3.22%	3.15%	4.57%	5.38%	5.78%
17	2006	3.24%	2.80%	7.97%	5.96%	4.97%	4.73%	4.91%	5.94%	6.30%
18	2007	2.85%	2.90%	8.05%	5.86%	5.02%	4.36%	4.84%	6.07%	6.24%
19	2008	3.84%	-8.80%	5.09%	2.39%	1.92%	1.37%	4.28%	6.34%	6.64%
20	2009	-0.36%	5.00%	3.25%	0.50%	0.00% - 0.25%	0.15%	4.08%	5.84%	6.87%
21	2010	1.64%	2.80%	3.25%	0.72%	0.00% - 0.25%	0.13%	4.25%	5.50%	5.98%
22	2011	3.00%	1.70%	3.25%	0.75%	0.00-0.25%	0.05%	3.93%	5.06%	5.58%
23	CURRENT	1.80%	2.70%	3.25%	0.75%	0.00% - 0.25%	0.09%	2.82%	3.78%	4.13%

REFERENCES:

COLUMN (A): 1990 - CURRENT, U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS WEB SITE
COLUMN (B): 1990 - CURRENT, U.S. DEPARTMENT OF COMMERCE, BUREAU OF ECONOMIC ANALYSIS
COLUMN (C) THROUGH (G): 1990 - 2003, FEDERAL RESERVE BANK OF ST. LOUIS WEB SITE
COLUMN (C) THROUGH (D): CURRENT, THE VALUE LINE INVESTMENT SURVEY, DATED 11/30/2012

COLUMN (F) THROUGH (I): CURRENT, THE VALUE LINE INVESTMENT SURVEY, DATED 11/30/2012
COLUMN (H) THROUGH (I): 1990 - 2000, MOODY'S PUBLIC UTILITY REPORTS
COLUMN (H) THROUGH (I): 2001, MERGENT 2002 PUBLIC UTILITY MANUAL
COLUMN (H) THROUGH (I): 2003 MERGENT NEWS REPORTS

TUCSON ELECTRIC POWER COMPANY
TEST YEAR ENDED DECEMBER 31, 2011
CAPITAL STRUCTURES OF SAMPLE COMPANIES (000's)

DOCKET NO. E-01933A-12-0291
SCHEDULE WAR - 9

LINE NO.	AEP	PCT.	CNL	PCT.	EDE	PCT.	ETR	PCT.	GXP	PCT.
1 DEBT	\$ 18,166.0	55.3%	\$ 1,327.0	51.9%	\$ 692.0	49.9%	\$ 12,237.0	57.5%	\$ 2,742.3	47.9%
2										
3 PREFERRED STOCK	0.0	0.0%	0.0	0.0%	0.0	0.0%	94.0	0.4%	39.0	0.7%
4										
5 COMMON EQUITY	14,665.0	44.7%	1,231.0	48.1%	694.0	50.1%	8,961.0	42.1%	2,959.9	51.6%
6										
7 TOTALS	\$ 32,831.0	100%	\$ 2,558.0	100%	\$ 1,386.0	100%	\$ 21,292.0	100%	\$ 5,741.2	100%
8										
9										
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11										
12 DEBT	\$ 1,340.0	46.1%	\$ 1,387.5	45.5%	\$ 3,320.0	53.8%	\$ 3,019.0	43.4%	\$ 1,672.0	24.3%
13										
14 PREFERRED STOCK	34.0	1.2%	0.0	0.0%	0.0	0.0%	0.0	0.0%	11.5	0.2%
15										
16 COMMON EQUITY	1,531.9	52.7%	1,662.0	54.5%	2,849.0	46.2%	3,931.0	56.6%	5,205.0	75.6%
17										
18 TOTALS	\$ 2,905.9	100%	\$ 3,049.5	100%	\$ 6,169.0	100%	\$ 6,950.0	100%	\$ 6,888.5	100%
19										
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21										
22										
23 DEBT	\$ 1,635.0	49.5%	\$ 18,647.0	50.5%	\$ 2,740.3	49.5%			\$ 68,925.1	50.9%
24										
25 PREFERRED STOCK	0.0	0.0%	0.0	0.0%	0.0	0.0%			179	0.1%
26										
27 COMMON EQUITY	1,666.0	50.5%	18,285.0	49.5%	2,790.6	50.5%			66,431	49.0%
28										
29 TOTALS	\$ 3,301.0	100%	\$ 36,932.0	100%	\$ 5,530.9	100%			\$ 135,535.0	100%
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REFERENCE:
MOST RECENT SEC 10(k) FILINGS OR COMPANY ANNUAL REPORTS

TUCSON ELECTRIC POWER COMPANY

DOCKET NO. E-01933A-12-0291

REDACTED DIRECT TESTIMONY

OF

FRANK W. RADIGAN

AND

PAUL GOETZ

ON BEHALF OF

THE

RESIDENTIAL UTILITY CONSUMER OFFICE

DECEMBER 21, 2012

TABLE OF CONTENTS

1		
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EXECUTIVE SUMMARY

Based on our analysis of Tucson Electric Power Company's ("TEP" or the "Company") rate application, we have concluded the following:

The Company has failed to justify all of the increase in plant in service since the last rate case and we recommend that the net plant in service be reduced by approximately \$167 million and test year depreciation expense by approximately \$3.9 million. The impact on the revenue requirement from this adjustment is approximately \$21 million. We should note that RUCO continues to gather information on the Company's budget process and supporting justification. RUCO leaves open the possibility to revise this adjustment to plant in service when it files its direct testimony on rate design on January 7, 2013 if it receives acceptable supporting documentation from the Company.

Based on our depreciation reserve analysis, which provides a metric of the accuracy of past depreciation rates, we have concluded that the theoretical reserve is higher than the book reserve meaning that depreciation expense has been overstated in the past and the Company accrued too much money from ratepayers.

There is a great deal of uncertainty around the timing, cost, and outcome of compliance with present and possible future environmental rules that might impact the Company's generating units, especially the coal fired generating units. There are also many possibilities as to what the eventual compliance with these regulations may be, including the potential for shutting down San Juan Units 1 & 2, where the Company expects to make the largest capital investment over the next few years.

INTRODUCTION

Q. MR. RADIGAN, PLEASE STATE YOUR FULL NAME, ADDRESS, AND OCCUPATION.

A. My name is Frank W. Radigan. I am a principal in the Hudson River Energy Group, a consulting firm providing services regarding the utility industry, specializing in the fields of rates, planning and utility economics. My office address is 237 Schoolhouse Road, Albany, New York 12203.

Q. PLEASE DESCRIBE THE HUDSON RIVER ENERGY GROUP.

A. The Hudson River Energy Group ("HREG") is an engineering consulting firm specializing in the fields of rates, planning, economics and utility operations for the electric, natural gas, steam and water utility industries. HREG was founded in 1998 and has served a wide variety of clients including municipal utilities, government agencies, state commissions, consumer advocates, law firms, industrial companies, power companies, and environmental organizations. HREG conducts rate design and cost of service studies, and designs performance-based rate plans. HREG also assists clients in handling the complexities of deregulation and restructuring, including Open Access Transmission Tariff pricing, unbundling of rates, resource adequacy, transmission planning policies, and power supply.

1 **Q. PLEASE SUMMARIZE YOUR EDUCATION AND BUSINESS**
2 **EXPERIENCE?**

3 **A. I received a Bachelor of Science degree in Chemical Engineering from**
4 **Clarkson College of Technology in Potsdam, New York (now known as**
5 **"Clarkson University") in 1981. I received a Certificate in Regulatory**
6 **Economics from the State University of New York at Albany in 1990. From**
7 **1981 through February 1997, I served on the Staff of the New York State**
8 **Public Service Commission ("NYPSC") in the Rates and System Planning**
9 **sections of the Power Division. My responsibilities included, resource**
10 **planning and the analysis of rates, depreciation rates and tariffs of electric,**
11 **gas, water and steam utilities in the state. These duties also encompassed**
12 **rate design, performing embedded and marginal cost of service studies, as**
13 **well as depreciation studies.**

14
15 Before leaving NYPSC, I was responsible for directing all engineering staff
16 during major proceedings, including those relating to rates, integrated
17 resource planning, and environmental impact studies. In February 1997, I left
18 NYPSC and joined the firm of Louis Berger & Associates as a Senior Energy
19 Consultant. In December 1998, I formed my own company.

20
21 In my 31 years of experience, I have testified as an expert witness in utility
22 rate proceedings on more than 100 occasions before various utility regulatory
23 bodies, including: the Arizona Corporation Commission, the Connecticut

1 Department of Public Utility Control, the Delaware Public Service
2 Commission, the Illinois Commerce Commission, the Maryland Public Service
3 Commission, the Massachusetts Department of Telecommunications and
4 Energy, the Michigan Public Service Commission, New York Public Service
5 Commission, the New York State Department of Taxation and Finance, the
6 Nevada Public Utilities Commission, the North Carolina Utilities Commission,
7 the Public Service Commission of the District of Columbia, the Public Utilities
8 Commission of Ohio, the Pennsylvania Public Utilities Commission, the
9 Rhode Island Public Utilities Commission, the Vermont Public Service Board,
10 and the FERC. Currently, I advise a variety of regulatory commissions,
11 consumer advocates, municipal utilities, and industrial customers concerning
12 rate matters, including wholesale electricity rates and electric transmission
13 rates. A copy of our resumes is attached as Exhibit__FWR/PG-1.

14
15 **Q. MR. GOETZ, PLEASE STATE YOUR FULL NAME, ADDRESS, AND**
16 **OCCUPATION.**

17 **A.** My name is Paul Goetz. I am a partner in the firm of Bollam, Sheedy, Torani,
18 & Company which is a multi-disciplinary certified public accounting and
19 management consulting firm offering accounting, auditing, tax, and
20 management consulting solutions 26 Computer Drive West, Albany, NY.

1 **Q. PLEASE SUMMARIZE YOUR EDUCATION AND BUSINESS**
2 **EXPERIENCE?**

3 A. I have a Bachelor's Degree in Business Administration from Siena College,
4 and currently serve on the Dean's Advisory Council at the Siena College
5 School of Business. I am a New York State Certified Public Accountant with
6 over 25 years of accounting and financial consulting experience. I have been
7 a partner since 2011 where I serve as a member of the Governmental
8 Services Group. Prior to that I served as the Managing Director of UHY
9 Advisors, beginning in 1985.

10
11 I have extensive background in accounting, auditing and consulting, having
12 garnered experience in commercial and governmental enterprises. I have
13 done numerous contract audits on behalf of several state departments of
14 transportation including Arizona, Connecticut, Delaware, New York and
15 Vermont. I regularly advise governmental agencies and authorities on various
16 accounting and regulatory matters. I have testified before a number of
17 regulatory bodies relating to management audits, accounting, and property
18 record reconstruction for villages and municipalities throughout NY, as well as
19 for numerous public utilities.

20

21 **Q. FOR WHOM ARE YOU APPEARING?**

22 A. We are testifying on behalf of the Residential Utility Consumers Office
23 ("RUCO").

1 **Q. WERE YOUR TESTIMONY AND EXHIBITS PREPARED BY YOU OR**
2 **UNDER YOUR DIRECT SUPERVISION AND CONTROL?**

3 A. Yes, they were.
4

5 **SCOPE OF TESTIMONY**

6 **Q. WHAT IS THE SCOPE OF YOUR TESTIMONY IN THIS PROCEEDING?**

7 A. We have been asked to review the justification in support of the increase in
8 plant in service from the last rate case; the justification and allocation of the
9 cost of the new headquarters building at 88 Broadway, Tucson; the
10 Company's depreciation study; and the justification for the Company's
11 proposed Environmental Compliance Adjustor ("ECA") and the Company's
12 proposal to add post test year plant to rate base.
13

14 **Q. HAVE YOU PREPARED ANY EXHIBITS IN SUPPORT OF YOUR**
15 **RECOMMENDATIONS?**

16 A. Yes, we have prepared the following exhibits:

17 Exhibit FWR/PG-1 Resumes of Frank Radigan and Paul Goetz

18 Exhibit FWR/PG-2 Response to RUCO 6.7

19 Exhibit FWR/PG-3 Response to RUCO 9.1 with Sample Attachment

20 Exhibit FWR/PG-4 21st Street Transformer

21 Exhibit FWR/PG-5 Response to RUCO 7.13 without Attachments

22 Exhibit FWR/PG-6 Extract from Attachment to Response to RUCO

23 7.13, August 2008 Presentation

Exhibit FWR/PG-7 Extract from Attachment to Response to RUCO

7.13, October 2010 Presentation

Exhibit FWR/PG-8 RUCO 7.03

Exhibit FWR/PG-9 RUCO 7.04

Exhibit FWR/PG-10 RUCO 7.06 and Excerpt from Attachment to

RUCO 7.13

Exhibit FWR/PG-11 RUCO 7.06, 7.07 & 7.08

Exhibit FWR/PG-12 Excerpt from Attachment to RUCO 7.13, August

2010 Presentation

Exhibit FWR/PG-13 Excerpt from Attachment to Response to RUCO

7.13, May 2011 Presentation

Exhibit FWR/PG-14 RUCO 7.23

Exhibit FWR/PG-15 UNS Headquarters Brochure

Exhibit FWR/PG-16 Excerpts from UNS 10-Ks for 2009 and 2010

Exhibit FWR/PG-17 Tucson Office Space Cost

SUMMARY OF TESTIMONY

Q. PLEASE SUMMARIZE YOUR TESTIMONY.

A. [BEGIN CONFIDENTIAL

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END CONFIDENTIAL].

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As such, the Company has failed to justify all of the increase in plant in service since the last rate case and we recommend that the net plant in service be reduced by approximately \$167 million and test year depreciation expense by approximately \$3.9 million. The impact on the revenue requirement from this adjustment is approximately \$21 million. We should note that RUCO continues

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1 to gather information on the Company's budget process and supporting
2 justification. RUCO leaves open the possibility to revise this adjustment to plant
3 in service when it files its direct testimony on rate design on January 7, 2013 if it
4 receives acceptable supporting documentation from the Company.

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6 [BEGIN CONFIDENTIAL
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END CONFIDENTIAL]

A depreciation reserve analysis compares what is recorded on the books of the utility - the book reserve - with the theoretical reserve. The book reserve is what the utility collected from ratepayers through depreciation rates and the theoretical reserve is a calculation of what the depreciation reserve "should be" based on the current estimates of average service life, survivor curves, and net salvage estimate. The reserve analysis provides a metric of the accuracy of past depreciation rates: if the theoretical reserve is higher than the book reserve, it means that the past depreciation parameters have overstated depreciation expense and the Company accrued too much money from ratepayers. [BEGIN CONFIDENTIAL

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2 END CONFIDENTIAL].

3
4 There is a great deal of uncertainty around the timing, cost, and outcome of
5 compliance with present and possible future environmental rules that might
6 impact the Company's generating units, especially the coal fired generating
7 units. There are also many possibilities as to what the eventual compliance
8 with these regulations may be, including the potential for shutting down San
9 Juan Units 1 & 2, where the Company expects to make the largest capital
10 investment over the next few years. The Company argues that the
11 reasonableness of its actions can be seen in its Integrated Resource Plan
12 ("IRP") but, as described more fully in testimony, reliance on the IRP process
13 is inadequate to address these issues as the IRP process itself could use
14 improvement; in the last IRP the Company itself noted that it was only a
15 "snapshot in time". Regulatory lag aligns the interests of the utility and
16 ratepayers so as to encourage the utility to make the least-cost option
17 available to it. There is nothing presented by the Company in this case that
18 shows the ECA would better align the interests of ratepayers and
19 shareholders. In fact, since the utility would know that it would be fully
20 compensated no matter the outcome of complying with environmental
21 regulations, there is a real risk that the ECA could result in higher costs to
22 ratepayers rather than lower. While there may be some level of expenditures
23 that could be supplied to the utility between rate cases such as what is

1 granted to Arizona Public Service Company ("APS"), the amount of money
2 being requested here goes well beyond that. Based on all of the above, we
3 do not recommend its adoption as currently proposed by the utility at this
4 time.

5
6 The Commission has ruled that post test year plant additions are generally
7 not allowed unless extraordinary circumstances are shown to exist. As
8 discussed above, by disallowing costs made between rate cases, it puts
9 financial pressure on the utility to minimize costs. We would note that the
10 utility has provided no evidence that extraordinary circumstances exist, but it
11 does point out that Arizona Public Service Company ("APS") was able to
12 recover post test year plant in its last rate case. The last APS rate case was
13 a settlement and not fully adjudicated. As such, RUCO does not support post
14 test year plant additions other than those for the Company's solar projects.
15 RUCO supports the addition of the solar projects because it recognizes the
16 commitment the Arizona Corporation Commission and other branches of
17 Arizona state government have made to encourage the expansion of solar
18 powered generation.

1 **PLANT IN SERVICE PROGRAM**

2 **Q. PLEASE DISCUSS THE GROWTH IN THE COMPANY ASSET BASE**
3 **SINCE THE LAST RATE CASE.**

4 **A. [BEGIN CONFIDENTIAL**

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17 **CONFIDENTIAL].**

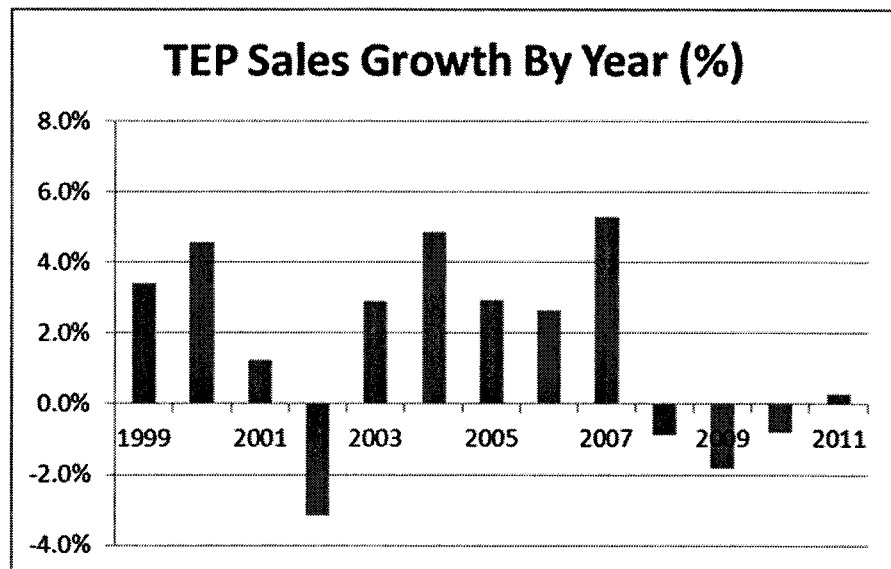
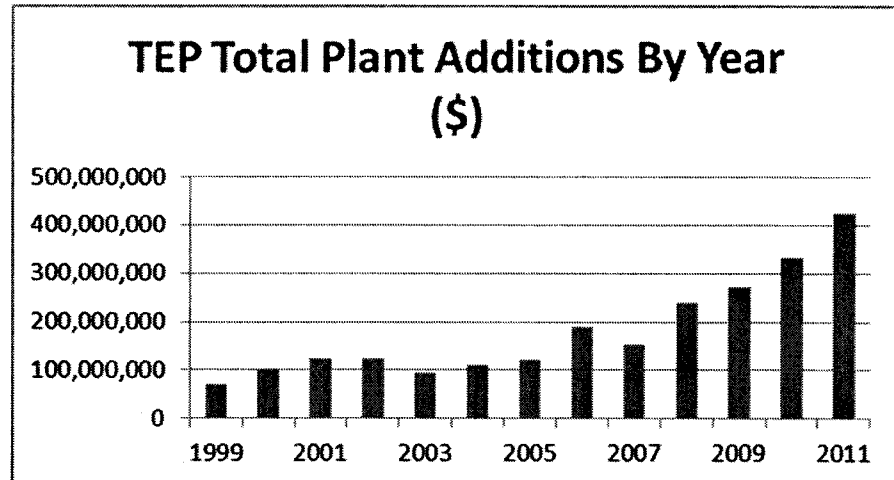
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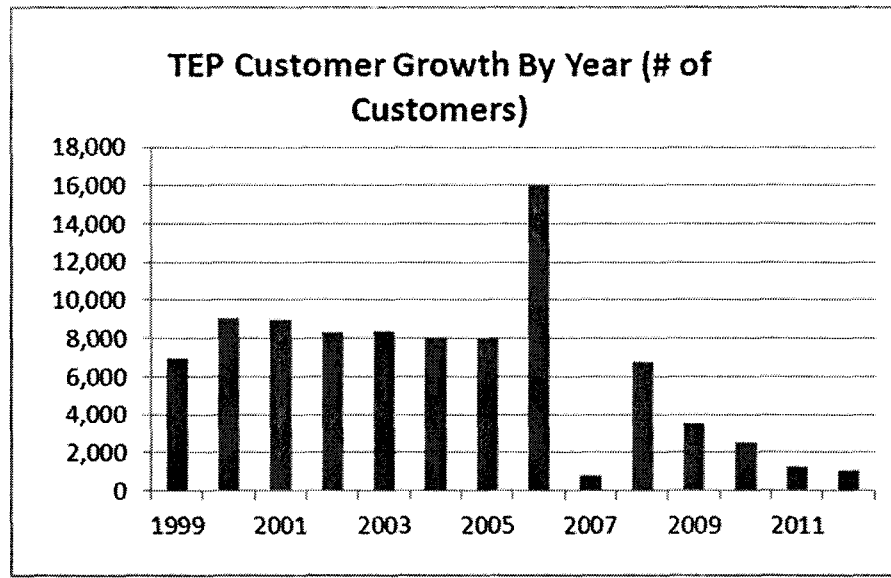
19 **Q. HOW DOES THE GROWTH IN PLANT COMPARE TO GROWTH IN**
20 **RETAIL SALES AND NUMBER OF CUSTOMERS?**

21 **A. They are directly opposite. As testified to by Company witness Bonavina:**
22
23 **TEP's retail sales had increased at a greater than 3 percent annual rate for**
24 **five successive years, including a 4.7 percent jump in 2007 (Bonavina Direct**
25 **at page 5)**
26

The Company's retail energy sales fell by 3.1 percent from 2007 to 2011 and are expected to drop another 0.7 percent in 2012. The downturn in Arizona's housing market and the increase in the unemployment rate combined to slow the traditional growth of TEP's retail customer base. After expanding at an average annual rate of 2.3 percent between 2000 and 2007, TEP's customer base grew by less than one percentage point in each of the last four years (Bonavia Direct at page 6).

The dramatic differences between spending growth and sales and customers growth are clearly illustrated by the graphs below that were assembled using data reported in TEP's FERC Form 1.





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3 **Q. ARE DIFFERENCES BETWEEN SPENDING GROWTH AND SALES**
4 **GROWTH IMPORTANT?**

5 **A.** Yes, regulated utilities are allowed to recover a return on investment that is
6 "used and useful". As such, if the utility builds a distribution substation, the
7 substation must be connected to the transmission system and used to provide
8 useful service to the utility's ratepayers. Building new capacity for new
9 customers is beneficial to the utility since the average residential customer
10 uses almost 11,000 kWh per year and the net revenues from the customer is
11 approximately \$750 per year. While that is a small amount for one customer,
12 one must consider that a new 2,500home subdivision might bring in as much
13 as \$1.8 million in revenues per year and support approximately \$14 million in
14 new plant investment for the utility. From the ratepayer point of view, capacity
15 planning at the substation is important: if the utility builds a substation too
16 large, it will be only partially used and partially useful, and the question must

1 arise of how much of the cost of the substation should be allowed in rates in
2 any given rate proceeding. As such, a review of the utility's capital budget
3 process is important to determine what the utility was building for and how it
4 was to be used.

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6 **Q. WHAT IS THE PROCESS BY WHICH THE COMPANY PLANS ITS**
7 **CAPITAL BUDGET PROGRAM?**

8 **A. [BEGIN CONFIDENTIAL**

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END CONFIDENTIAL].

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Q. HAVE YOU BEEN ABLE TO REVIEW THE DETAIL TO WHICH COMPANY

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PERSONNEL JUSTIFIES A CAPITAL PROJECT TO THE MANAGEMENT

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OF THE COMPANY?

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**Q. WAS YOUR INVESTIGATION ONLY LIMITED TO TRANSMISSION AND
DISTRBUTION EXPENDITURES?**

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**Q. WHAT TYPE OF SUPPORT WOULD YOU EXPECT THE COMPANY TO
PROVIDE AND WHY IS THAT INFORMATION IMPORTANT?**

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END CONFIDENTIAL].

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One should note that the utility has many options to deal with a transformer that is overloaded. It can let the transformer operate that way provided the condition is only a few hours of the year, or it can transfer load to another substation (sometimes at very little cost). In this case, it is important to note that the addition of the second transformer was for future load.

14

15

16

A scenario such as this demonstrates how a seemingly routine action by the Company can potentially lead to confusion in the matter of cost justification, and why it is crucial for the Company to provide support for such everyday actions. If the new transformer was sized and rated to meet future load, ratepayers might question why they should be asked to pay for the project at the present time when such load is not needed. If the load does in fact materialize in the future, the Company will benefit by having one set of customers pay for the upgrade while another provides excess revenues. On

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1 the other hand, if the load does not materialize, ratepayers might surmise
2 they are paying for what appears to them to be the Company's inaccurate
3 planning.

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2 **Q. PLEASE DISCUSS THE IMPORTANCE OF CAPITAL BUDGETING.**

3 A. Capital budgeting is critical to regulated capital intensive companies. The
4 process must be rigorous to minimize consumer costs while maintaining a
5 high level of reliability. As described below, the process is inherently
6 extensive and complex. Because of its importance both for forecasting cash
7 flow and for optimizing limited financial resources, the process needs to be
8 extensively documented. In this case, the inability to obtain support for the
9 process and justification of major expenditures is surprising and contradictory
10 to normal practices.

11
12 A description of such normal practices is excerpted here from *Accounting for*
13 *Public Utilities*, Robert L. Hahne and Gregory E. Aliff, LexisNexis updated
14 through #27, November 2010:

15 *Section 15.02 page 15 – 11*

16
17 The unique characteristics of utility planning are as follows:

- 18
- 19 • The capital-intensive nature of the utility industry leads to a heavy emphasis on
20 capital budgeting (which often starts a few months earlier than expense
21 budgeting) and I'm budgeting maintenance cost parenthesis I PAET., Costs for
22 preventative and corrective maintenance and outages).
 - 23
 - 24 • Annual and long-term production and transmission capacity planning is of major
25 importance. Because of the variety of electricity and gas sources now made
26 available by technological, regulatory, and economic changes, "make versus
27 buy" decisions have become a part of the capacity planning process. Electric
28 utility practices such as demand-side management and conservation marketing
29 Harolds so provide alternatives to building new capacity. The arrival of market
30 measures has affected these planning activities resulting in some surprising
31 market anomalies. In addition, the greater interest in "green energy" And
32 "sustainable energy" production is creating further planning challenges, as "green
33 power" initiatives has) parenthesis usually) a different supply profile, higher
34 degrees of interrupt ability of supply, advantageous tax regimes and many
35 consumers may well pay a premium for "green power". Planning for impacts and
36 opportunities associated with the "smart grid" and transmission distribution

1 systems system upgrades adds a further complexity.

2
3 *Pages 15-13, -14, and -15*

4 The planning process often includes the following major tasks.

5 --Examined business environment and company capabilities.

6 --Review/develop strategic plan.

7 --Develop overall operating and financial plan.

8 --Are planning and budgeting instructions.

9 --Prepare functional action plans.

10 --Prepare responsibility area budgets.

11 --Consolidate area budgets.

12 --Prepare pro forma financial statements.

13 --Evaluate regulatory impact.

14 --Resolved an approved budgets.

15 The planning process is supported by planning models.

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30 **Q. HAS THE COMPANY MET ITS BURDEN OF PROOF THAT ITS**
31 **ACTIONS WERE JUSTIFIED?**

32 **A.** No. Based on our review of the Company's capital budget process, we find that
33 while the Company states that it has a reasonable means to assemble and cost
34 justify individual projects, it cannot show that it does so. This does not mean
35 that the justification does not exist, but rather in the course of this adjudicated
36 proceeding it could be there was just a simple miscommunication as to the
37 information desired versus the information provided. In an effort to fully develop
38 the record in this case, RUCO is still trying to gather information on the
39 Company's budget process and supporting justification. RUCO leaves open the
40 possibility to revise this adjustment to plant in service when it files its direct

1 testimony on rate design on January 7, 2013 if it receives acceptable supporting
2 documentation from the Company.

3

4 **Q. WHAT DO YOU RECOMMEND?**

5 A. The two largest budget categories are for Production and Transmission &
6 Distribution. Based on the support provided, we recommend that only the
7 amount of plant that has been supported as needed be allowed in rate base.
8 The Company reports several budget categories are done under blanket work
9 orders which are based on historical spending levels or for public policy and
10 largely outside of their direct control (renewable and solar). Also, while no cost
11 justification for expenditures on transmission projects have been provided in this
12 proceeding, the Company does provide some cost information to the
13 Transmission Line Siting Committee. While Transmission Plan is not a subject
14 of this proceeding, for budget purposes it is reported along with distribution so it
15 impacts the review process. As we said previously, RUCO is still gathering
16 information and we hope that the Company can provide justification beyond
17 what they already have; we have covered under blanket work orders.

18

19 The final adjustment therefore is meant to reflect no support for projects over
20 which they have direct control and for which they should have been able to
21 provide justification. The process was implemented to reduce the amount of
22 plant that has been added to rate base since the end of 2006. This reduces
23 gross plant and allows a recalculation of the depreciation reserve and

1 depreciation expenses, thereby resulting in a new net plant figure. . We believe
2 that this is the only reasonable means to implement an adjustment to reflect a
3 lack in support for expenditures made. In dollar terms, this recommendation
4 results in a reduction in gross plant of \$162 million out of the approximately
5 \$900 million that the Company has added since 2006. Put another way this
6 adjustments disallows, for lack of support, 18% of the expenditures made. The
7 impact on the revenue requirement from this adjustment is approximately \$21
8 million.

9
10 **NEW HEADQUARTERS BUILDING**

11 **Q. PLEASE DISCUSS THE COMPANY'S INVESTMENT IN A NEW**
12 **HEADQUARTERS BUILDING.**

13 **A.** In the current rate case, TEP states that it has invested approximately \$92
14 million related to construction of a new headquarters building in downtown
15 Tucson (DeConcini Direct at page 26). The Company states that the new
16 building has alleviated significant overcrowding at TEP's campus on East
17 Irvington Road where hundreds of employees were working in trailers
18 separating them from other related workgroups (Ibid). The Company also
19 states that though the up-front cost associated with building a new corporate
20 headquarters is significant, customers will realize significant and measurable
21 benefits in the long term (DeConcini Direct at page 27). Finally, the Company
22 states that the new building also allowed them to bring more than 500

1 employees together in a dedicated work environment that was built for their
2 specific business needs (Ibid).

3

4 **Q. WHAT ARE THE BENEFITS THE COMPANY CLAIMS WILL BE REALIZED**
5 **WITH THE NEW BUILDING?**

6 A. Based on the explanation offered by the Company, it appears that the most
7 important benefits are an improved work environment for employees and that
8 the new building allows employees to work more efficiently (DeConcini Direct
9 at page 27). The improved work environment comes from the fact that the
10 work facilities at Irvington Road were old and in need of improvement. The
11 improved efficiency comes from the fact that instead of having some
12 employees located downtown and some located at Irvington Road, all
13 employees are now assigned to offices in the same areas of the building,
14 making it much easier to communicate and collaborate while saving travel
15 time.

16

17 **Q. PLEASE PROVIDE SOME BACKGROUND ON WHY A NEW**
18 **HEADQUARTERS BUILDING WAS PLANNED?**

19 A. [BEGIN CONFIDENTIAL

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END CONFIDENTIAL].

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[BEGIN CONFIDENTIAL

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END CONFIDENTIAL].

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**Q. DID UNS EXAMINE MANY OPTIONS IN DECIDING WHERE TO LOCATE
ITS NEW HEADQUARTERS BUILDING?**

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A. [BEGIN CONFIDENTIAL

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END

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CONFIDENTIAL].

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Q. WHEN DID THE COMPANY FIRST CONSIDER HOUSING MORE THAN

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JUST CORPORATE FUNCTION EMPLOYEES IN THE BUILDING?

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A. [BEGIN CONFIDENTIAL

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3 END CONFIDENTIAL].

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5 **Q. PLEASE DISCUSS THE IRVINGTON ROAD FACILITY**

6 **A. [BEGIN CONFIDENTIAL**

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END CONFIDENTIAL].

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**Q. ARE YOU AWARE OF ANY OTHER FACTORS THAT IMPACTED THE
CONSTRUCTION OF THE NEW HEADQUARTERS BUILDING?**

5

6

A. [BEGIN CONFIDENTIAL

7

8

END CONFIDENTIAL]. New Market

9

Tax Credits are a Federal program to incent investment in low-income
communities. The New Market Tax Credit Program was established in 2000.

10

11

The credit program is incorporated in Section 45D of Internal Revenue Code.

12

13

The program allows for the receipt of credit against Federal Income taxes for
making Qualified Equity Investments (QEI) in qualified community

14

development entities (CDE's). The program was established with the

15

expectation of creating jobs and making material improvement in the lives of

16

residents of low-income communities or populations.

17

18

A qualified equity investment is defined as an investment into a Community

19

Development Entity (CDE). The CDE enters into an allocation agreement with

20

the Community Development Financial Institutions Fund (CDFI) who provides

21

allocations of New Market tax credits to CDI's allowing them to attract

22

investments from the private sector to be reinvested in low income

23

communities

1 The program provides for credits equal to 39% of the investment into the CDI.
2 The credit is provided over a seven years and is equal to 5% of the qualified
3 investment in Years One-Three and 6% of the qualified investment in Years
4 Four-Seven. [BEGIN CONFIDENTIAL

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END CONFIDENTIAL].

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11 **Q. WHEN DID THE COMPANY REALIZE THAT IT WOULD NOT BE GETTING**
12 **THE NEW MARKET TAX CREDIT?**

13 **A. [BEGIN CONFIDENTIAL**

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END

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CONFIDENTIAL].

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Q. WHEN DID UNS TRANSFER OWNERSHIP OF THE NEW

9

HEADQUARTERS BUILDING TO TEP?

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A. [BEGIN CONFIDENTIAL

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END CONFIDENTIAL].

13

14

Q. WHAT CONCLUSIONS DO YOU DRAW FROM THE COMPANY'S

15

DECISION MAKING PROCESS?

16

A. The facts are clear the new headquarters building was conceived as a

17

corporate headquarters for UNS and not for TEP. The original plan and

18

design of the building was just to bring employees with corporate duties

19

together under one roof. That the new building is the headquarters of the

20

UNS Corporation is still the building's main function. Brochures in the lobby

21

of the new building describe the building as "UniSource Energy's solar-

22

powered energy-efficient Tucson headquarters" and declare the corporate

1 headquarters "a showcase of green construction and design"
2 (Exhibit__FWR/PG-15 UNS Headquarters Brochure).

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4 [BEGIN CONFIDENTIAL

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13 END CONFIDENTIAL].

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15 [BEGIN CONFIDENTIAL

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21 END CONFIDENTIAL].

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1 Q. WHAT ARE THE RATEMAKING IMPLICATIONS OF THE NEW
2 HEADQUARTERS BUILDING BEING PRINCIPALLY BUILT FOR
3 CORPORATE PURPOSES?

4 A. Docket No. U-1933-97-176¹ was the proceeding whereby Tucson Electric
5 Power Company was allowed to form a Holding Company. In that proceeding,
6 the Company proposed 17 conditions as safeguards to ensure that the formation of
7 the Holding Company structure would not result in adverse consequences to TEP.
8 In approving the petition, the Arizona Corporation Commission imposed several
9 more safeguard conditions and approved those proposed by the Company. One of
10 the original safeguard conditions was as follows:

11 The Holding Company, TEP and sister companies will strive to charge the lower of
12 fully allocated cost or market price whenever goods, products or service are
13 sold/provided by the Holding Company or sister companies to TEP and the higher of
14 fully allocated cost or market price whenever TEP sells/provides non-tariffed goods,
15 products or services to the Holding Company or sister companies. The Holding
16 Company, TEP and sister companies recognize that determining a market price for
17 all goods, products and services being transferred in and among the Holding
18 Company, TEP and sister companies could be a complex or difficult task for some
19 items. Nonetheless, the Holding Company, TEP and sister companies agree to
20 attempt to determine a market price for any good, product or service being provided
21 by TEP to the Holding Company or sister companies as well as for any good,
22 product or service provided by Holding Company or sister companies to TEP
23 whenever the annual, fully allocated cost for given good, product or service being
24 transferred exceeds \$500,000 annually. Furthermore, TEP will retain such market
25 research information (regardless of whether it is ever utilized) until such time as the
26 Utilities Division Staff or its representative have reviewed such information.

27
28 The implications of these safeguard conditions are clear: had UNS continued
29 to own the new headquarters building it would not be allowed to charge any
30 more than market rates for rent. If TEP owned the building, however, it would

¹ Docket No. U-1993-97-176, In the matter of the Notice of Intent of Tucson Electric Power Company to Organize a Public Utility Holding Company and for Related Approvals or Waivers Pursuant to R14-2-1801, ET SEQ., Decision No. 60480 issued November 25, 1997.

1 be allowed to charge the higher of embedded cost or market rates. In other
2 words, if the cost of the new building exceeded the market rate, TEP should
3 own the building; if the cost of the new building was less than the market rate,
4 the holding Company became indifferent to who owns the building.

5

6 **Q. WHAT IS THE FULLY ALLOCATED COST OF THE NEW**
7 **HEADQUARTERS BUILDING AND THE MARKET RATE FOR OFFICE**
8 **SPACE IN DOWNTOWN TUCSON?**

9 A. [BEGIN CONFIDENTIAL

10

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12

13 **END CONFIDENTIAL].** Published market rates
14 for a full service lease for Class A office space in downtown Tucson is \$25
15 per square foot of rentable office space and \$12 per square foot outside of
16 downtown (Exhibit__FWR/PG-17 Tucson Office Space Cost).

17

18 **Q. WHAT DO YOU RECOMMEND BE DONE IN THIS PROCEEDING?**

19 A. [BEGIN CONFIDENTIAL

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² A full service lease includes the cost of operation and maintenance expense as well as property taxes.

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END

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CONFIDENTIAL].

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DEPRECIATION RESERVE ANALYSIS

9

Q. WHAT IS DEPRECIATION?

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A. According to the Supreme Court of the United States:

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Broadly speaking, depreciation is the loss; not restored by current maintenance, which is due to all the factors causing the ultimate retirement of the property. These factors embrace wear and tear, decay, inadequacy and obsolescence. Annual depreciation is the loss which takes place in a year.³

17

Another commonly cited definition comes from the American Institute of Certified Public Accountants which defines depreciation as follows:

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Depreciation accounting is a system of accounting which aims to distribute the cost or other basic value of tangible capital assets, less salvage (if any) over the estimated useful life of the unit (which may be a group of assets) in a systematic and rational manner. It is a process of allocation, not of valuation. Depreciation for the year is a portion of the total charge under such a system that is allocated to the year. Although the allocation may properly take into account occurrences during the year, it is not intended to be a measurement of the effect of all such occurrences.

27

Q. WHAT IS DEPRECIATION EXPENSE?

28

A. The depreciation expenses of a utility are determined by applying approved

29

depreciation rates to the depreciable plant balances. The rates are developed

³ *Lindheimer v. Illinois Bell Telephone Company*, 292 U.S. 151, 167 (1934).

1 separately for particular classes of plant, such as production (e.g., gas-fired
2 generation, coal-fired generation), transmission, distribution, etc., based on
3 detailed studies.

4
5 **Q. WHAT IS THE DEPRECIATION RESERVE?**

6 A. While depreciation expense represents the annual recovery of the capital
7 investment, there is another depreciation category that records all
8 depreciation expense, retirements, cost of removal and gross salvage on a
9 continuous basis. This account is the accumulated provision for depreciation,
10 also known as the depreciation reserve. The depreciation reserve serves as a
11 "running total" of the extent to which individual assets or groups of assets
12 have been depreciated. In a depreciation study, the depreciation reserve
13 is known by several other names as well, the most notable being the
14 "book reserve", the "recorded reserve" or the "actual reserve".

15
16 **Q. WHAT IS THE THEORETICAL RESERVE?**

17 A. The theoretical reserve is the amount of money that should have been
18 accrued had the depreciation parameters been in effect for all plants since it
19 was installed. The theoretical reserve can be calculated using current
20 depreciation parameters (service life, life table, and net salvage), or proposed
21 parameters in the case of a new depreciation study.

1 **Q. WHAT IS A DEPRECIATION RESERVE ANALYSIS?**

2 A. A depreciation reserve analysis compares what is recorded on the books of
3 the utility - the book reserve - with the theoretical reserve. The theoretical
4 reserve is a calculation of what the depreciation reserve "should be", based
5 on the current estimates of average service life, survivor curves, and net
6 salvage estimate. The comparison between the book reserve and the
7 theoretical reserve provides a metric of the accuracy of past depreciation
8 rates.

9
10 If the theoretical reserve is higher than the book reserve it means that the
11 past depreciation parameters have overstated depreciation expense and the
12 Company accrued too much money. If the theoretical reserve is lower than
13 the book reserve it means that the past depreciation parameters have
14 understated depreciation expense and the Company accrued too little money.

15
16 **Q. HOW ARE DIFFERENCES IN THE BOOK RESERVE AND THEORETICAL**
17 **RESERVE TREATED UNDER THE COMPANY'S STUDY?**

18 A. The Company is using the "remaining life technique" to recover any
19 differences. When using the remaining life technique, depreciation expense
20 is calculated by determining how much of a depreciation reserve is required
21 and then subtracting the book reserve from that amount. The result is the
22 amount of money that needs to be accrued in the future. This future accrual
23 is then divided by the remaining life to get the annual depreciation expense.

1 Thus, as the calculation takes into account both how much money has
2 already been accrued and how much must be accrued in the future, the
3 remaining life technique is self-correcting with respect to differences in book-
4 to-theoretical reserves. [BEGIN CONFIDENTIAL

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END CONFIDENTIAL].

10

11 **Q. IS THE COMPANY'S METHODOLOGY FOR TREATMENT OF RESERVE**
12 **IMBALANCES THE ONLY OPTION?**

13 A. No. There are times when the differences are so large that this self-
14 correcting feature of the remaining life technique is considered too long a
15 period to recover differences in the book to theoretical reserve. When that
16 happens, an amortization of the difference or a portion of the difference is
17 either collected or passed back to ratepayers over a shorter period of time.

18

19 **Q. CAN YOU PROVIDE CITATION FOR DIFFERENT TREATMENTS OF**
20 **RESERVE IMBALANCES?**

21 A. Yes. The National Association of Regulatory Utility Commission ("NARUC")
22 has published a manual on depreciation practices for use primarily by staff of
23 the various public utility commissions. The purpose of this resource is to

1 present background material and operating practices for the determination of
2 depreciation of public utility property in matters of regulation. The manual,
3 entitled "Public Utility Depreciation Practices" published in 1996 states at
4 page 188:

5 A reserve imbalance exists when the theoretical reserve is either greater or
6 less than the actual reserve. If changes are made to the estimated service life
7 and net salvage, creating a reserve imbalance, a decision must be made as
8 to whether and how to correct the reserve imbalance. Should the imbalance
9 be amortized (debited or credited) to the current depreciation expense over a
10 short period of time; or should a remaining life depreciation rate be used to
11 spread the imbalance over the future remaining life of the plant; or should
12 future depreciation rates be adjusted to reflect the current estimated service
13 life of the plant leaving the decision to adjust the reserve for the future?
14 Further analysis will provide additional information to assist in making these
15 decisions.

16
17 When a depreciation reserve imbalance exists, one should investigate why
18 past depreciation rates, average service lives, salvage, or cost of removal of
19 removal amounts differ from current estimates. Care should be taken to
20 analyze these effects before correcting for the reserve imbalances. Instances
21 will occur where subsequent experience shows the original estimates no
22 longer to be appropriate. It should be noted that only after plant has lived its
23 entire useful life will the true depreciation parameters become known.
24 Recognizing the nature of depreciation and its requirement for future
25 estimations, no adjustment in annual depreciation accruals to reflect a
26 reserve requirement, based on current rates, should be made unless there is
27 a clear indication that the theoretical reserve is materially different from the
28 book reserve.

29
30 Whereas the judgment of materiality is subjective, if further analysis confirms
31 a material imbalance, one should make immediate depreciation accrual
32 adjustments. The use of an annual amortization over a short period of time or
33 setting of depreciation rates using the remaining life technique are two of
34 the most common options for eliminating the imbalance. The size of the plant
35 account, the reserve ration, the account remaining life, the technology of the
36 plant in the account, and the account reserve imbalance in relationship to the
37 account annual accrual all have a bearing on the chosen course of action.
38

1 Q. CAN YOU PROVIDE EXAMPLES FOR DIFFERENT TREATMENT OF
2 RESERVE IMBALANCES?

3 A. Yes. In two recent cases, the Florida Public Service Commission
4 ("FPSC") found that there were significant levels of excess reserves for
5 the utilities before them and that the levels represented too great a level of
6 intergenerational inequity⁴. In each of these cases, the FPSC ordered four-
7 year amortizations of the excess reserves.⁵

8
9 In another recent case in Connecticut, the issue of large over-accruals
10 was also addressed. There the Connecticut Department of Utility Control
11 (now the Connecticut Public Utilities Regulatory Authority) found that since
12 the reserve imbalance was large, some sort of accelerated amortization of
13 the depreciation reserve returned to ratepayers in the near term would be fair
14 to both customers and the Company⁶. As such, the Connecticut Department
15 of Utility Control ordered a pass back of the excess reserve over a seven year
16 period⁷.

17
18

⁴ A situation where the current generation pays and future generations enjoy the benefit.
⁵ FPSC Order No. PSC-10-1053-FOF in Docket No. 080677-EI - Petition for increase in rates
by Florida Power & Light Company and Docket No. 090130-EI - 2009 depreciation and
dismantlement study by Florida Power & Light Company, issued March 17 2010, Order at
page 87; and FPSC Order No. PSC-10-0131-FOF-EI -- Docket No. 090079-EL --Petition for
increase in rates by Progress Energy Florida, Inc., et. al., issued March 5, 2012, Order at
page 52.

⁶ Docket No. 09-12-05, Application of the Connecticut Light & Power Company to Amend its
Rate Schedules, Final Decision issued June 30, 2010, page 76.

⁷ Ibid.

1 **Q. WHAT ARE THE BOOK AND THEORETICAL RESERVES FOR TEP?**

2 **A. BEGIN CONFIDENTIAL**

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8 **END CONFIDENTIAL].**

9

10 **Q. WHAT WERE THE BOOK AND THEORETICAL RESERVES FOR TEP IN**
11 **THE COMPANY'S LAST DEPRECIATION STUDY?**

12 **A.** The details are provided in Statement C of the 2007 Depreciation Rate Study
13 as presented as Exhibit KAK-1 to Company witness Kateregga's testimony in
14 Docket No. E-O1933A-07-0402. For December 31, 2006, the total recorded
15 book reserve for the Company was \$1,024,972,639 and the theoretical
16 reserve was \$721,458,451, for a difference of \$303,514,188.

17

18 **Q. DO YOU BELIEVE ANYTHING SHOULD BE DONE WITH THE**
19 **DIFFERENCE IN BOOK AND THEORETICAL RESERVE IN THIS CASE?**

20 **A.** Yes, it should be returned to ratepayers. While there is no general rule of
21 thumb or industry standard on pass back of reserve imbalance, in our
22 experience, given that depreciation studies contain so many accounts,
23 parameters and assumptions, if the difference between the book and

1 theoretical reserve is +/- 10% then no adjustment should be made as this
2 level of reserve imbalances is within the range of reason⁸. When the reserve
3 imbalance is larger than +/- 10% one should consider a pass back or
4 collection to get the book and theoretical reserves in balance again; balancing
5 the book and theoretical reserves assures ratepayers and stockholders that
6 the depreciation expenses being charged are fair and reasonable. The timing
7 of the pass back or collection of the reserve imbalance is subject to the
8 amount of the reserve imbalance. [BEGIN CONFIDENTIAL

13 END

14 CONFIDENTIAL].

15
16 With all of this in mind, we recommend that the reserve imbalance be reduced
17 to +10 percent with the difference returned to ratepayers in an accelerated
18 manner, and further recommend a pass back of six years. This
19 recommendation reduces the revenue requirement very conservatively by
20 approximately \$21 million.
21

⁸ In the case in Connecticut the reserve imbalance was a 55% over accrual and in the cases of Florida Power and Light the reserve imbalance was \$1.2 billion or approximately 10% over accrued.

ENVIRONMENTAL COMPLIANCE ADJUSTOR

Q. PLEASE DISCUSS THE COMPANY'S PROPOSAL FOR AN ENVIRONMENTAL COMPLIANCE ADJUSTOR?

A. The Environmental Compliance Adjustor ("ECA") is a proposal for a mechanism that would allow TEP to recover the costs required to meet environmental compliance standards imposed by federal or other governmental agencies. TEP is proposing the implementation of the ECA in this rate case in response to an ever-increasing number of rules creating more stringent environmental standards that require the Company to invest an unprecedented amount of capital in its generation resource portfolio over the next five years (Hutchens Direct at page 23). Company Witness Hutchens provides the reasoning behind the ECA and Company Witness Jones is sponsoring the details to the ECA adjustor mechanism itself.

Q. PLEASE SUMMARIZE THE COMPANY'S REASONS FOR THE ECA?

A. Depending on the final outcome of certain proposed regulations, TEP's total capital outlays could approach \$400 million, in addition to annual increases in O&M costs in the tens of millions of dollars (Hutchens Direct at page 25). TEP will not be able to phase-in or control the timing of these costs, as the compliance deadlines are mandated exclusively by the EPA and judicial rulings (Ibid).

1 The Company states it is likely most of the expenditures discussed above will
2 occur between rate cases (Hutchens Direct at page 25). For TEP, these
3 environmental mandates will result in reduced cash flow and increased capital
4 and O&M expenditures without recovery of those costs through increased
5 revenue because of the extended time between the adjudication of TEP rate
6 cases (Ibid). If this occurs, it will be detrimental to TEP's financial health and
7 may adversely impact its access to capital on reasonable terms (Ibid). For
8 TEP's customers, absence of the ECA will negatively impact them because
9 the accumulated capital costs and increased O&M will result in larger rate
10 increases (Ibid).

11
12 Company Witness Hutchens states that the availability of an ECA to recover
13 environmental compliance costs as they incur - between rate cases - is
14 preferable, as they would lead to more moderate annual rate increases
15 (Hutchens Direct at page 26). Otherwise, Mr. Hutchens opines that TEP's
16 financial health will suffer and its customers will have to absorb large rate
17 increases following the adjudication of multiple general rate cases (Ibid).

18
19 **Q. WHAT TYPES OF ENVIRONMENTAL PROJECTS WOULD BE COVERED**
20 **UNDER THE ECA?**

21 A. In general, the aforementioned environmental standards apply to, but are not
22 limited to, the following: sulfur dioxide, nitrogen oxide, carbon dioxide, ozone,
23 particulate matter, volatile organic compounds, mercury and other toxics, coal

1 ash and other combustion residuals, and water intake (Exhibit CAJ-6, page
2 1). Some of the types of regulations that could be covered by the ECA are
3 those that impact regional haze mandates, mercury emissions, greenhouse
4 gases, and ozone standards (Hutchens Direct at page 24). The cost to
5 comply varies from plant to plant, from a low of a \$5 million capital upgrade at
6 Springerville to a high of a \$200 million capital upgrade at the San Juan
7 Generating Station (Hutchens Direct at pages 25 and 24 respectively).

8
9 **Q. PLEASE DISCUSS THE MECHANICS OF HOW THE ECA WOULD WORK?**

10 **A.** Company Witness Jones states that the investments that qualify for the ECA
11 shall be those projects designed to comply with current or prospective
12 environmental standards required by federal, state, tribal, or local laws and
13 regulations (Exhibit CAJ-6, page 1). For these qualified investments, the
14 Company will be allowed a return (based on TEP's Weighted Average Cost of
15 Capital approved by the Commission), depreciation expense, income taxes,
16 property taxes, operation and maintenance expenses, and deferred taxes and
17 tax credits where applicable (Jones FT at page 62). The Company will also
18 be allowed to get a return for ECA qualified investments prior to the in-service
19 date ("CWIP") (Ibid at page 63).

20
21 TEP will submit a filing supporting its ECA rate with the Commission on
22 March 1 of each year. TEP proposes that the ECA rate adjustment become
23 effective on May 1st following the March filing, unless suspended by the

1 Commission (Ibid). The Commission may review the capital expenditures
2 and other costs related to environmental compliance with the annual ECA
3 filing and within the context of a rate case to determine prudence (Ibid). The
4 Integrated Resource Plan ("IRP") process also provides the Commission with
5 a proceeding to review the cost of TEP's overall resource portfolio, including
6 the costs of compliance with existing and proposed environmental regulations
7 (Ibid).

8
9 **Q. PLEASE DISCUSS HOW THE PROPOSED ECA COMPARES TO THE**
10 **APS'S RECENTLY APPROVED ENVIRONMENTAL IMPROVEMENT**
11 **SURCHARGE?**

12 **A.** In Docket No. E-03145A-11-0224, the APS was allowed to revise its existing
13 Environmental Improvement Surcharge to collect costs incurred to comply
14 with environmental regulations⁹. The Environmental Improvement Surcharge
15 in that case was initially set to zero and was capped at \$0.00016 per kWh
16 (see Decision No. 73183 Attachment H page 3 of 5). For the APS, with 28
17 million megawatt hours in retail sales, the cap on the Environmental
18 Improvement Surcharge equates to a maximum charge of \$4.5 million per
19 year.

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21

⁹ Docket No. E-01345-11-0224, In the Matter of the Application of Arizona Public Service Company for a Hearing to Determine the Fair Value of the Utility Property of the Company for Ratemaking Purposes, to Fix a Just and Reasonable Rate of Return Thereon, to Approve Rate Schedules Designed to Develop Such Return, Decision No. 73183, issued May, 24, 2012.

1 **Q. PLEASE COMMENT ON THE COMPANY'S PROPOSED ECA**

2 A. Automatic adjustment mechanisms replace the current practice of regulatory
3 lag wherein the utility is not compensated for investments made between rate
4 cases until rates are reset in a new rate case. Regulatory lag puts financial
5 pressure on the utility when it needs to invest money for a new customer or to
6 comply with an imposed mandate, but it also aligns the interests of
7 ratepayers and shareholders in that it gives utility management a strong
8 incentive to minimize expenditures and decrease net income. Automatic
9 adjustment clauses, on the other hand, act to relieve the utility of fighting to
10 keep costs down and therefore divide the interest of ratepayers and
11 shareholders. As such, automatic adjustment clauses have generally been
12 reserved for expenditures that are largely beyond the utility's control, such a
13 fuel prices.

14
15 When reviewing automatic adjustments clauses such as this, there is a trade-
16 off between the loss of financial incentive to the utility to minimize costs and
17 the increase in financial protection being granted to the utility through
18 automatic recovery of costs. This is true with automatic adjustments clauses
19 for fuel and purchased power, infrastructure improvements for safety, or
20 environmental compliance. In this case, the utility argues that the IRP
21 process provides the Commission with a proceeding to review the cost of
22 TEP's overall resource portfolio, including the costs of compliance with
23 existing and proposed environmental regulations.

1 **Q. DO YOU AGREE THAT THE CURRENT IRP PROCESS IS AN ADEQUATE**
2 **VENUE FOR REVIEW OF THE COMPANY'S RESOURCE PLANNING**
3 **PROCESS?**

4 **A.** Not at this time. While the Commission's IRP rules are comprehensive and
5 do require utilities to show how they are planning for the future, one must also
6 recognize that the IRPs as filed were not formally ruled upon by the
7 Commission. Thus, while there are many benefits to the existing IRP
8 process, one must remember that it was not a formal process wherein the
9 Company's IRP was thoroughly vetted with testimony, discovery, and formal
10 approval by the Commission. As such, a utility could state its actions are
11 justified as evidenced by the IRP, but the IRP may be flawed and not justify
12 that action at all.

13
14 **Q. IS THAT THE CASE HERE?**

15 **A.** In TEP's case, a review of the 2012 IRP¹⁰ shows some areas for concern
16 indicating an overreliance on the IRP process that might not yield the
17 optimum - or lowest cost - result for ratepayers. First, the Commission's IRP
18 rules state that the utilities must address energy efficiency so as to meet
19 Commission requirements. The TEP 2012 IRP does just that. In its IRP, TEP
20 proposes to pursue a range of cost-effective and industry-proven programs to
21 meet future energy efficiency ("EE") targets. The proposed EE portfolio

¹⁰ Docket No. E-00000A-11-0113, Pursuant to A.A.C. R14-2-703, et seq., Tucson Electric Power Company filed its 2012 Integrated Resource Plan on May 2, 2012.

1 maintains compliance with the Arizona EE Standard (2012 IRP page 23).
2 However, the issue of concern is that the IRP shows energy efficiency as the
3 lowest cost resource, at a levelized cost of \$60 per MWH (2012 IRP page 89),
4 but the Company compares all of the upgrades at its coal plants against a
5 new gas-fired combined cycle plant with a levelized cost of \$88 per MWH
6 (2012 IRP at page 322). The cost of environmental upgrades at Four Corners
7 Station (levelized cost of \$64 per MWH 2012 IRP at page 322) and the San
8 Juan Generating Station (levelized cost of \$79 per MWH -2012 IRP at page
9 329) are both more costly than doing energy efficiency. While it is recognized
10 that there may not be enough energy efficiency potential to replace all of the
11 capacity of these generating stations, TEP did not review the potential in
12 enough detail to make that determination, even though energy efficiency is
13 the Company's least-cost resource.

14
15 Another area of concern with an over reliance on the IRP process is that
16 compliance with present and proposed environmental mandates is a moving
17 target. TEP itself recognizes this in the 2012 IRP where it states

18 Decisions around the future of TEP's coal resources are at the center of
19 TEP's 2012 IRP. Several of TEP's coal-fired facilities are facing complex
20 environmental challenges that will have significant rate impacts and have the
21 potential to force them into early retirement.

22
23 As with any planning analysis, the 2012 IRP represents a snapshot in time
24 based on existing conditions and reasonable planning assumptions. Even
25 after the 2012 IRP filing date, TEP anticipates that the plant participants will
26 continue to work through the complex issues surrounding plant operating
27 agreements, fuel contracts, land leases, transmission contracts and lease
28 purchase options before the final resource decisions are made. As shown in
29 Figure 1, the final decision on whether TEP continues to invest in its existing

1 coal-fired facilities or in other replacement resources will be determined on a
2 plant by plant basis over the course of the 12-18 months after the 2012 IRP
3 filing. It is important to note that the final decision on whether or not TEP
4 continues to maintain its ownership interests in Four Corners, NGS and SJGS
5 assumes that economically viable outcomes are reached on all current
6 negotiations between plant owners, site lessors, transmission lessors and
7 coal suppliers. Due to TEP's small ownership percentage in several of the
8 jointly owned coal plants and the complex nature of agreements governing
9 these plants, the final decision to remain in any particular coal plant may
10 ultimately be decided by forces beyond TEP's control (2012 IRP at page 18).
11 .

12 [BEGIN CONFIDENTIAL
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END CONFIDENTIAL].

¹¹ Hartranft, Michael (2012, Oct 2) San Juan power plant proposal would retire two units, state says. *Albuquerque Journal*. Retrieved from www.abqjournal.com

1 Q. WHAT CAN YOU CONCLUDE FROM YOUR REVIEW OF THE
2 REASONABLENESS OF THE ECA?

3 A. There is a great deal of uncertainty around the timing, cost, and outcome of
4 compliance with present and possible environmental rules that might impact
5 the Company's generating units, especially the coal fired generating units.
6 There are also many possibilities as to what the eventual compliance with
7 these regulations may be, including the potential for shutting down San Juan
8 Units 1 & 2, where the Company anticipates making its biggest investment
9 over the next few years. Reliance on the IRP process is inadequate to
10 address these issues as the IRP process itself could use improvement; in the
11 last IRP, the Company itself noted that it was a "snapshot in time".
12

13 As noted above, regulatory lag aligns the interests of the utility and ratepayers
14 so as to encourage the utility to make the least cost option available to it.
15 There is nothing presented by the Company in this case that shows the ECA
16 would better align the interests of ratepayers and shareholders. In fact, since
17 the utility would know that it would be fully compensated no matter the
18 outcome of complying with environmental regulations, there is a real risk that
19 the ECA could result in higher costs to ratepayers rather than lower. While
20 there may be some level of expenditures that could be supplied to the utility
21 between rates cases such as what is granted to APS, the amount of money
22 being requested here goes well beyond that. Based on all of the above, we

1 do not recommend its adoption as currently proposed by the utility at this
2 time.

3
4 **POST TEST YEAR ADJUSTMENTS**

5 **Q. COULD YOU PLEASE DISCUSS THE COMPANY'S PROPOSED POST**
6 **TEST YEAR ADJUSTMENTS?**

7 A. TEP has adjusted its rate base to include approximately \$40 million of used
8 and useful solar projects and other plant additions that have been, or are
9 expected to be, placed in service between December 31, 2011 (the end of the
10 test year) and December 31, 2012 (Hutchens Direct at page 33). These
11 projects will be benefiting customers by the time new rates are effective.

12
13 As a general rule, the Commission does not favor post test year plant unless
14 extraordinary circumstances are present, and then up to 12 months out¹²¹³.

15 As discussed above, by disallowing costs made between rate cases, it puts
16 financial pressure on the utility to minimize costs. We would note that the
17 utility has provided no evidence that extraordinary circumstances exist, but it
18 does point out that APS was able to recover post test year plant in its last rate
19 case. The last APS rate case was a settlement and not fully adjudicated. As
20 such, RUCO does not support post test year plant additions other than those
21 for the Company's solar projects. While acceptance of such plant outside of a

¹² In APS the Commission allowed post test year plant for 18 months after the end of the test year but that case was a result of a settlement of all issues.

¹³ See Decisions 7001 and 7360.

1 test year is unprecedented for RUCO, RUCO does so because it recognizes
2 the commitment the Arizona Corporation Commission and other branches of
3 Arizona state government have made to encourage the expansion of solar
4 power.

5
6 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

7 **A.** Yes, it does.
8
9
10

EXHIBIT FWR/PG-1

FRANK W. RADIGAN

EDUCATION

B.S., Chemical Engineering -- Clarkson University, Potsdam, New York (1981)

Certificate in Regulatory Economics -- State University of New York at Albany (1990)

SUMMARY OF PROFESSIONAL EXPERIENCE

1998–Present Principal, Hudson River Energy Group, Albany, NY -- Provide research, technical evaluation, due diligence, reporting, and expert witness testimony on electric, steam, gas and water utilities. Provide expertise in electric supply planning, economics, regulation, wholesale supply and industry restructuring issues. Perform analysis of rate adequacy, rate unbundling, cost-of-service studies, rate design, rate structure and multi-year rate agreements. Perform depreciation studies, conservation studies and proposes feasible conservation programs.

1997–1998 Manager Energy Planning, Louis Berger & Associates, Albany, NY – Advised clients on rate setting, rate design, rate unbundling and performance based ratemaking. Served a wide variety of clients in dealing with complexities of deregulation and restructuring, including OATT pricing, resource adequacy, asset valuation in divestiture auctions, transmission planning policies and power supply.

1981–1997 Senior Valuation Engineer, New York State Public Service Commission, Albany, NY – Starting as a Junior Engineer and working progressively through the ranks, served on the Staff of the New York State Department of Public Service in the Rates and System Planning Sections of the Power Division and in the Rates Section of the Gas and Water Division. Responsibilities included the analysis of rates, rate design and tariffs of electric, gas, water and steam utilities in the State and performing embedded and marginal cost of service studies. Before leaving the Commission, was responsible for directing all engineering staff during major rate proceedings.

FIELDS OF SPECIALIZATION

Electric power restructuring, wholesale and retail wheeling rates, analysis of load pockets and market power, divestiture, generation planning, power supply agreements and expert witness testimony, retail access, cost of service studies, rate unbundling, rate design and depreciation studies.

PROJECT HIGHLIGHTS

Wholesale Commodity Markets

Transmission Expansion Planning – Various Utilities -- Member of Transmission Expansion Advisory Committee in the New England Power Pool – the Committee is charged with the study of transmission expansion needs in the deregulated New England electric market. Ongoing

Locational Based Pricing – Reading Municipal Light Department -- Using GE multi-area production simulation model (MAPS), analyzed New England wholesale power market to cost differences between various generators and load centers. 2003

Merchant Plant Analysis – Confidential client – Using GE multi-area production simulation model (MAPS), analyzed New York City wholesale power market to determine economics of restructuring PURPA era contract to market priced contract. 2002

Market Price Forecasting – El Paso Merchant Energy – Analyzed New England power market using MAPS for purpose of pricing natural gas supply in order to ensure that plant was dispatched at 70% capacity factor as required under its gas supply contract. 2002

Market Price Analysis – Novo Windpower – Analyzed hourly market price data in New York for each load zone in State in order to optimize location of new wind power projects. 2002

Gas Aggregation – Village of Ilion – Advised client on costs/benefits of aggregating residential gas customers for purpose of gas purchasing. 2002

Gas Procurement – Albany County, New York – Assisted client in analysis of economics of existing gas purchase contract; negotiated termination of contract; designing request for proposal for new natural gas supply. 2000

HQ Prudence Review – Selected by Vermont Public Service Board to perform prudence review power supply contract between Hydro Quebec and Central Vermont Public Service Corporation. 1998

Wholesale Power Supply – Prepared comprehensive RFP to optimize power supply for Solvay municipal utility by complementing existing low cost power supplies in order to entice new industrial load to locate within Village. 1997

Analysis of Load Pockets and Market Power – Performed analysis of load pockets and market power in New York State; determined physical and financial measures that could mitigate market power. 1996

Study of IPP Contracts and Impacts in New York – Performed study to determine rate impacts of power purchase contracts entered into by investor owned utilities and independent power producers (IPPs); separately measured rate impacts resulting from statewide excess-capacity; determined level of non-optimal reserves for each utility. 1995

Power Purchase Contract Policies and Procedures – Directed NYSPSC Staff teams in formulation of short- and long-run avoided cost estimates (LRACs) using production simulation model (PROMOD); forecasted load and capacity requirements; developed utility buy-back rates; presented expert witness testimony on buy-back rate estimates and calculation methodologies, thereby implementing curtailment of IPPs as allowed under PURPA. 1990-1994

Integrated Resource Planning – Led NYSPSC Staff team's examination of each utility's IRP process and examination of impacts of processes and regulatory policies influencing the decision making process. 1994

Intrastate Wheeling Commission Transmission Analysis and Assessment – Chairman of NYSPSC Proceeding to examine plans for meeting future electricity needs in New York State. Addressed measures for estimating and allocating costs of wheeling, including embedded cost, short-run marginal cost and long run incremental cost methods. 1990

Rate Setting

Jurisdictional Cost of Service – Mississippi Power Company – On behalf of the Staff of the Mississippi Public Utilities Staff prepared a report on the reasonableness of the Company's jurisdictional cost of service study. 2010

Rate Case Cost of Service Study – Heritage Hills Water Works – For small water company, performing cost of service study for the preparation of a full cost of service study before the New York Public Service Commission. 2009

Rate Case Cost of Service Study – Stowe Electric Department, NY – For small municipal electric utility, assisted in the preparation full cost of service study before the Vermont Public Service Board. 2009

Rate Study – Hudson River Black River Regulating District -- For regulating body performed detailed cost of service allocation in order to allocate costs among beneficiaries of water regulation.

Rate Case Cost of Service Study – Village of Greene, NY – For small municipal electric utility, assisted in the preparation full cost of service study before the New York Public Service Commission. 2008

Rate Case Cost of Service Study – Village of Bath, NY – For small municipal electric utility, assisted in the preparation full cost of service study before the New York Public Service Commission. 2008

Rate Case Cost of Service Study – Village of Richmondville, NY – For small municipal electric utility, assisted in the preparation full cost of service study before the New York Public Service Commission. 2008

Economic Development Rate – Massena Electric Department – For municipal electric utility, developed tariffs for economic development rates for new or expanded load.

Rate Case Cost of Service Study – Village of Hamilton, NY – For small municipal electric utility, prepared full cost of service study before the New York Public Service Commission. 2004

Rate Study – Pascoag Utility District – Reviewed the application of the Power Authority of the State of New York to increase rates to its wholesale power customers. 2003

Rate Study - Kennebunk Power and Light Department – Performed rate study of new multi-year wholesale power contract against existing rates to determine impact on overall revenue recovery and cash flows of utility. 2003

Rate Case Cost of Service Study – Village of Arcade, NY – For small municipal electric utility, assisted in the preparation full cost of service study before the New York Public Service Commission. 2003

Rate Case Cost of Service Study – Village of Philadelphia, NY – For small municipal electric utility, assisted in the preparation full cost of service study before the New York Public Service Commission. 2003

Rate Case Cost of Service Study – Village of Hamilton, NY – For small municipal electric utility, prepared full cost of service study before the New York Public Service Commission. 2004

Rate Case Cost of Service Study – Fillmore Gas Company – For small natural gas local distribution company, performing cost of service study for internal budget controls and formal rate case before the New York Public Service Commission. 2003

Rate Case Cost of Service Study – Rowlands Hollow Water Works – For small water company, performing cost of service study for internal budget controls and formal rate case before the New York Public Service Commission. 2003

Standby Rates – Independent Power Producers of New York – Analyzed reasonableness of proposed standby rates of Niagara Mohawk Power Corporation; proposed alternate rate designs; participated in settlement negotiations for new rates. 2002

Economic Development Rates – Pascoag Utility District – Designed new cost based economic development rates charged to large industrial customer contemplating locating within the municipality. 2002

Municipalization Study – Kennebunk Power and Light Department – Performed economic analysis of municipal utility serving remaining portions of Village not already served; performed valuation of the plant currently owned by Central Maine Power. 2001

Water Rate Study – Pascoag Utility District – Performed cost of service study for water utility; presented alternate methods of funding revenue requirement. 2001

Pole Attachment Rates – Middleborough Gas and Electric Department – Designed cost based pole attachment rates charged to CATV customers. 2000

ISO Service Tariff -- On behalf of three municipal utilities, analyzed cost basis and proposed rate design of ISO Service Tariffs. 2000

Pole Attachment Rates – City of Farmington, New Mexico municipal electric department – Designed cost based pole attachment rates for CATV customers. 1999

OATT Rates – On behalf of four municipal utilities in New England – Developed cost based annual revenue requirements for regional network transmission rates; represent utilities before ISO New England committees on transmission rate setting issues. 1998-2004

Consolidated Edison Restructuring – Member NYPSC Staff team – Negotiated major restructuring settlement with Consolidated Edison, which decreased utility's rates by \$700 million over five years; implemented retail access program; performed rate unbundling; divestiture of utility generation and the allowance of the formation of a holding company; accelerated depreciation of generation; established customer education programs on restructuring; established service quality and service reliability incentive to ensure that provision of electric service will diminish as competitive market emerges. The agreement served as the template for restructuring in New York. 1997

Cost-of-service Review and Rate Unbundling – Performed rate unbundling of retail rates of Orange & Rockland Utilities, Inc. to facilitate delivery of New York Power Authority energy to customer located in Orange & Rockland's service territory. 1992

Vintage Year Salvage and Study - Managed joint study of staff from Rochester Gas and Electric Corporation and NYPSC to determine feasibility of using vintage year salvage accounting for determining future salvage rates. 1985

Environmental Issues

Energy Conservation Study – Pascoag Utility District – Designed energy conservation rebate program based on cost benefit study of various alternatives. Program funded through State mandated collection of energy conservation monies from ratepayers. 2002

Clean Air Act Lawsuit – New York State Attorney General – Investigated modifications made at coal fired generating units of New York utilities to determine whether major modifications were made with obtaining pre-construction permits as required by the prevention of Significant Deterioration (PSD) provisions of the Act. 1999-2002.

Environmental Impact Study and Simulation Modeling Analysis – Analyzed potential environmental impacts of restructuring electric industry in NY using production simulation model PROMOD. 1996

Renewable Resources – Project Leader in NYSPSC proceeding regarding development and implementation of utility plans to promote use of renewable resources. 1995

Environmental and Economic Impacts Study – Directed study of pool-wide power plant dispatch with environmental adders to determine environmental and economic effects of dispatching electric power plants with monetized environmental adders. 1994

Clean Air Impact Study – Directed study of effects of the Clean Air Act of 1990. Measured statewide cost savings if catalytic reduction control facilities were elected to comply with 1990 Clean Air Act Amendments; installed components on units in metropolitan NY region. 1994

Environmental Externalities and Socioeconomic Impacts Study – Managed NYSPSC proceeding to determine whether to incorporate environmental costs into Long-Run Avoided Costs for the State's electric utilities. Study purposes: explore the socioeconomic impacts of electric production as compared with DSM; monetize environmental impacts of electricity. 1993

EXPERT WITNESS TESTIMONY

Case 09-E-0715 – New York State Electric and Gas Corporation -- On behalf of Nucor Steel, Auburn, Inc. examined the reasonableness of the utility's proposed construction program, revenue allocation, rate design and decoupling mechanism. 2010

Case 09-S-0029 – Consolidated Edison – On behalf of the County of Westchester testified to the reasonableness of a Report Regarding Steam Price Elasticity and Long Term Steam Revenue Requirement Forecast 2010

Docket No. 09-01299 – Utilities, Inc. of Central Nevada - On behalf of the Nevada Attorney General's Bureau of Consumer Protection testified on the overall revenue requirement, the appropriate level of rate case expense, and allocation of corporate salaries. 2010

Docket No. 09-12-11 – Connecticut Water Company – On behalf of the Connecticut Office of Consumer's Counsel examined the reasonableness of the proposed Water Conservation Adjustment Mechanism. 2010

Case 9217 – Potomac Electric Power Company – On behalf of the Maryland Office of People's Counsel examined the reasonableness of the utility's proposed jurisdictional cost of service study, revenue allocation and rate design. 2010

Docket No. 09-12-05 – Connecticut Light & Power Company – On behalf of the Connecticut Office of Consumer's Counsel examined the reasonableness of the proposed depreciation rates, revenue allocation and rate design. 2010

Case 09-S-0794 – Consolidated Edison – Steam Rates -- On behalf of County of Westchester testified to the reasonableness of the Company's proposal to increase retail rates. 2010

Case 09-G-0795 – Consolidated Edison – Gas Rates -- On behalf of County of Westchester testified to the reasonableness of the Company's proposal to increase retail rates. 2010

Case 10-S-0001 – Project Orange Associates, LLC -- On behalf of Project Orange Associates testified to the reasonableness of whether the steam customers of Syracuse University could benefit if a steam transportation tariff were adopted by the New York Public Service Commission. 2009

Docket No. E-7, Sub 900 – Duke Energy Carolinas, LLC – On behalf of the Sierra Club, Southern Alliance for Clean Energy testified on the reasonableness of the Company's request to recover construction work in progress in rate base and to comment on whether the costs incurred by the Company for the supercritical coal plant Cliffside Unit 6 are reasonable and prudent. 2009

D.P.U. 8-64 – New England Gas Company – On behalf of the Massachusetts Attorney General testified to the reasonableness of the accuracy of the Company's accounting data as it related to affiliate transaction with the parent Company. 2009

Formal Case No. 1027 – Washington Gas Light Company – On behalf of the Office of People's Counsel for the District of Columbia testified to the reasonableness of the Company's use of mechanical couplings and problems related thereto. 2009

Docket No. G-04204A-08-0571 – UNS Gas, INC. – On behalf of the on behalf of the Arizona Residential Utility Consumer Office examined the reasonableness of the Company's embedded cost of service study, proposed revenue allocation, and proposed rate design. 2009

Case 09-S-0029 – Consolidated Edison – On behalf of the County of Westchester testified to the reasonableness of the method of allocating costs between the utility's steam system and its electric system. 2009

Docket No. 09-0407 – Commonwealth Edison – On behalf of the People of the State of Illinois testified to the reasonableness of Company's Chicago Area smart Grid Initiative. 2009

Docket No. E-01345A-08-0172 – Arizona Public Service – On behalf of the on behalf of the Arizona Corporation Commission examined the reasonableness of the Company's embedded cost of service study, proposed revenue allocation, proposed rate design and proposal regarding demand side management cost recovery. 2009

Case 9182 – Maryland Water Service, Inc. – On behalf of the Maryland Office of People's Counsel examined the reasonableness of the utility's proposed bulk purchased water rate increase. 2009

Case 9182 – Artesian Water Maryland, Inc. – On behalf of the Maryland Office of People's Counsel examined the reasonableness of the utility's proposed advance fees to connect new water customers in the Whitaker Woods subdivision. 2009

Case 08-E-0539 – Consolidated Edison – Electric Rates -- On behalf of County of Westchester testified to the reasonableness of the Company's proposal to increase retail electric rates by \$854 million. 2008

Docket No. 08-07-04 – United Illuminating – On behalf of the Connecticut Office of Consumer's Counsel examined the reasonableness of the Company's proposed construction budget. 2008

Docket No. 08-06036 – Spring Creek Utilities - On behalf of the Nevada Attorney General's Bureau of Consumer Protection testified on the overall revenue requirement, the cost allocation and amortization of a new financial accounting system, the appropriate level of rate case expense, allocation of corporate salaries, recovery of property taxes, and rate design. 2008

D.P.U. 8-35 – New England Gas Company – On behalf of the Massachusetts Attorney General testified to the reasonableness of the Company's request to increase rates in light of the terms of a previous settlement, the level of expenses being charged from the parent Company to the affiliate, the proposed increase in depreciation expense and the proposed revenue allocation and rate design. 2008

Docket No. 08-96 – Artesian Water Company - on behalf of the Staff of the Delaware Public Service Commission examined the reasonableness of the Company's cost of service study and proposed revenue allocation and rate design. 2008

Docket No. 05-03-17PH02 – Southern Connecticut Gas Company – on behalf of the Connecticut Office of Consumer's Counsel examined the reasonableness of the Company's embedded costs of service study and proposed revenue allocation and rate design. 2008

Docket No. 06-03-04PH02 – Connecticut Natural Gas Corporation – on behalf of the Connecticut Office of Consumer's Counsel examined the reasonableness of the Company's embedded cost of service study and proposed revenue allocation and rate design. 2008

Docket No. G-01551A-07-0504 – Southwest Gas Corporation – on behalf of the Arizona Corporation Commission examined the reasonableness of the Company's embedded cost of service study, proposed revenue allocation, proposed rate design and proposals regarding revenue decoupling. 2008

Docket No. E-01933A-07-0402 – Tucson Electric Power Company – on behalf of the Arizona Corporation Commission examined the reasonableness of the Company's embedded cost of service study, proposed revenue allocation, proposed rate design and proposals regarding mandatory time of use rates. 2008

Docket No. 07-09030 – Southwest Gas Corporation – on behalf of the Staff of the Nevada Public Utilities Commission testified on the reasonableness of the utility's proposed depreciation rates. 2008

Civil Action 05-C-457-1 – Dominion Hope – on behalf of former employee of the utility examined the utility's hedging and sales for resale practices between affiliates. 2008

Case 07-829-GA-AIR – Dominion East Ohio – on behalf of the Office of the Ohio Consumer's Counsel examined the reasonableness of the Company's embedded cost of service study, proposed revenue allocation and rate design

and examined the reasonableness of proposals on revenue decoupling and straight fixed variable rate design. 2008

Case 07-S-1315 – Consolidated Edison Steam Rates -- On behalf of County of Westchester testified to the reasonableness of the method of allocating costs between the utility's steam system and its electric system. 2008

Case No. 9134 – Green Ridge Utilities, Inc. – on behalf of the Maryland Office of People's Counsel examined the reasonableness of the utility's proposed rate application including the appropriate cost allocation and amortization period for expenses incurred to develop and implement Project Phoenix (a new software and financial accounting system project), the appropriate level of rate case expense, the requested rate of return and the appropriate level and allocation for common expenses from the parent company. 2008

Case No. 9135 -- Provinces Utilities, Inc. – on behalf of the Maryland Office of People's Counsel examined the reasonableness of the utility's proposed rate application including the appropriate cost allocation and amortization period for expenses incurred to develop and implement Project Phoenix (a new software and financial accounting system project), the appropriate level of rate case expense, the requested rate of return and the appropriate level and allocation for common expenses from the parent company. 2008

Case 07-M-0906 – Energy East and Iberdola – On behalf of Nucor Steel, Auburn, Inc. examined the reasonableness of the proposed Acquisition of Energy East Corporation by Iberdola merger. 2008

Case 07-E-0523 – Consolidated Edison – Electric Rates -- On behalf of County of Westchester testified to the reasonableness of the Company's proposal to increase retail electric rates by over \$1.2 billion or 33%. 2007

Docket Nos. ER07-459-002, ER07-513-002, and EL07-11-002 – Vermont Transco -- on behalf of the Vermont Towns of Stowe and Hardwick, and the Villages of Hyde Park, Johnson and Morrisville on whether the direct assignment and rate impacts of a proposed transmission line were with current policy of the Federal Energy Regulatory Commission 2007

Docket No. 07-05-19 – Aquarion Water Company – On behalf of the Connecticut Office of Peoples Counsel examined the reasonableness of the utility's proposed revenue allocation, rate design, weather normalization and depreciation rates 2007

Docket No. E-04204A-06-0783 – UNS Electric – On behalf of the Arizona Corporation Commission testified on the reasonableness of the utility's proposed revenue allocation and rate design. 2007

Docket Nos. 06-11022 and 06-11023 – Nevada Power Company – On behalf of the Staff of the Nevada Public Utilities Commission testified on the reasonableness of the utility's proposed depreciation rates and expense levels. 2007

Case 06-G-1186 – KeySpan Delivery Long Island – on behalf of the Counties of Nassau and Suffolk analyzed the Company's proposed rate design and its for amortization of costs for expenditures relating to Manufactured Gas Plants. 2007

Case 06-M-0878 – National Grid and KeySpan Corporation -- on behalf of the Counties of Nassau and Suffolk analyzed the public benefit of the proposed merger, customer service, demand side management programs, rate relief as it relates to competition and customer choice, the repowering of the existing generating stations on Long Island, and the remediation of contamination caused by Manufactured Gas Plants. 2007

Docket No. 06-07-08 – Connecticut Water Company – On behalf of the Connecticut Department of Utility Control examined the reasonableness of the utility's proposed depreciation rates, revenue allocation and rate design. 2006

Docket No. EL07-11-000 – Vermont Transco -- on behalf of the Vermont Towns of Stowe and Hardwick, and the Villages of Hyde Park, Johnson and Morrisville evaluated whether the proposed and subsequently abandoned allocation of costs for the Lamoille County Project was reasonable and whether the direct assignment and rate impacts of a proposed transmission line were with current policy of the Federal Energy Regulatory Commission. 2006

Case 05-S-1376 – Consolidated Edison – Steam Rates -- On behalf of County of Westchester testified to the reasonableness of the method of allocating costs between the utility's steam system and its electric system. 2006

Docket No. 06-48-000 – Braintree Electric Light Department – On behalf of the municipal utility presented an cost of service study used to calculate the annual revenue requirement for a generating station that was deemed to be required for reliability purposes. 2006

Case 05-E-1222 – New York State Electric and Gas Corporation – On behalf of Nucor Steel, Auburn, Inc. examined the reasonableness of the utility's proposed average service lives, forecast net salvage figures, and proposal to switch from whole life to remaining life method. 2006

Docket No. 05-10004 – Sierra Pacific Power Company – On behalf of the Staff of the Nevada Public Utilities Commission testified on the reasonableness of the utility's proposed electric depreciation rates and expense levels. 2006

Docket No. 05-10006 – Sierra Pacific Power Company – On behalf of the Staff of the Nevada Public Utilities Commission testified on the reasonableness of the utility's proposed gas depreciation rates and expense levels. 2006

Docket No. ER06-17-000 – ISO New England, Inc. – On behalf of a group of municipal utilities in Massachusetts prepared an affidavit on the reasonableness of proposed changes to the Regional Network Service transmission revenue requirements rate setting formula. 2005

Case 04-E-0572 – Consolidated Edison – Electric Rate – On behalf of the County of Westchester testified to the reasonableness of the Company's revenue allocation amongst service classes and the company's fully allocated embedded cost of service study. 2004

Docket No. 04-02-14 – Aquarion Water Company – On behalf of the Connecticut Department of Utility Control examined the reasonableness of the utility's proposed depreciation rates, weather normalization proposal and certain operation and maintenance expense forecasts. 2004

Docket No. U-13691 – Detroit Thermal, LLC – On behalf of the Henry Ford Health Systems testified on the reasonableness of the utility's proposed default tariffs for steam service. 2004

Docket No. 04-3011 – Southwest Gas Corporation – On behalf of the Staff of the Nevada Public Utilities Commission testified on the reasonableness of the utility's proposed depreciation rates and expense levels. 2004

Docket No. ER03-563-030 -- Devon Power, LLC, *et al.* – On behalf of the Wellesley Municipal Light Plant filed a prepared affidavit with FERC with respect the proposal of ISO New England, Inc. to establish a locational Installed Capability market in New England. 2004

Docket No. 03-10002 – Nevada Power Company – On behalf of the Staff of the Nevada Public Utilities Commission testified on the reasonableness of the utility's proposed depreciation rates and expense levels. 2004

Case 03-E-0765 – Rochester Gas and Electric Corporation - Before the New York Public Service Commission submitted testimony on rate design, rate unbundling, depreciation, commodity supply and reasonableness and ratemaking treatment of proceeds from the sale of a nuclear generating plant. 2003

New York State Department of Taxation and Finance Versus Brooklyn Navy Yard Cogeneration Partners – Testified on behalf of independent power producer in income tax case regarding tax payments associated with gas used to produce electricity. Testimony focused on ratemaking policies and practices in New York State. 2003

Docket No. 2930 – Narragansett Electric – Before the Rhode Island Public Utilities Commission submitted testimony on the reasonableness of the utility's proposed shared savings filing and its implications for the overall reasonableness of the Company's distribution rates. 2003

Docket No. 03-07-01 – Connecticut Light and Power Company – Before the Connecticut Department of Public Utility Control testified to the recovery of “federally mandated” wholesale power costs. 2003

Docket No. ER03-1274-000 – Boston Edison Company – Before the Federal Energy Regulatory Commission submitted affidavit on the reasonableness of the utility’s proposed depreciation rates and expense levels. 2003

Case 210293 – Corning Incorporated – Before the New York Public Service Commission submitted an affidavit on certain actions of New York State Electric & Gas Corporation regarding the wholesale price of power in New York and the utility’s billing practices as they relate to flex rate contracts. 2003

Case 332311 – Nucor Steel Auburn, Inc. – Before the New York State Public Service Commission submitted an affidavit on certain actions of New York State Electric & Gas Corporation regarding the wholesale price of power in New York and the utility’s billing practices as they relate to flex rate contracts. 2003

Case 6455/03 – Prepared affidavit for consideration by the Supreme Court of the State of New York as to the purpose, need and fuel choice for the Jamaica Bay Energy Center (Jamaica Bay) as it related to good utility planning practice for meeting the energy needs of utility customers. 2003

Case 00-M-0504 – New York State Electric and Gas Corporation – Reviewed reasonableness of utility’s fully allocated embedded cost of service study and proposed unbundled delivery rates. 2002

Docket No. TX96-4-001 – On behalf of the Suffolk County Electrical Agency proposed unbundled embedded cost rates for wheeling of wholesale power across distribution facilities. 2002

Case 00-E-1208 – Consolidated Edison: Electric Rate Restructuring – On behalf of Westchester County, addressed reasonableness of having differentiated delivery services rates for New York City and Westchester. 2001

Case 01-E-0359 – Petition of New York State Electric & Gas – Multi-Year Electric Price Protection Plan – Addressed reasonableness of Price Protection Plan (PPP); presented alternative rate plan that called for 20% decrease in utility’s base rates. 2001

Case 01-E-0011 – Joint Petition of Co-Owners of Nine Mile Nuclear Station – Addressed the reasonableness of the proposed nuclear asset sale and the ratemaking treatment of the after gain sale proposed by NYSEG. 2001

Docket No. EL00-62-005 – ISO New England Inc. – Submitted affidavit on reasonableness of ISO’s proposed \$4.75/kW/month Installed Capability Deficiency Charge. June 2001

Docket No. EL00-62-005 – ISO New England Inc. – Submitted affidavit on reasonableness of proposed \$0.17/kW/month Installed Capability Deficiency Charge. January 2001

Docket No. 2861 – Pascoag Fire District: Standard Offer, Charge, Transition Charge and Transmission Charge – Testified on elements of individual charges, procedures for calculation and reasons for changes from previous filed rates. 2001

Case 96-E-0891 – New York State Electric & Gas: Retail Access Credit Phase – On behalf of a large industrial customer, testified on cost of service considerations regarding NYSEG’s earnings performance under the terms of a multi-year rate plan and the appropriate level of Retail Access Credit for customers seeking alternate service from alternate suppliers. 2000

Docket No. ER99-978-000 – Boston Edison Company: Open Access Transmission Tariff – Testified on design, revenue requirement, and reasonableness of proposed formula rates proposed by Boston Edison Company for calculating charges for local network transmission service under open access tariff. 1999

Docket Nos. OA97-237-000, et. al. – New England Power Pool: OATT – Testified on design, revenue requirement, and reasonableness of proposed formula rate for transmission service; testified to proposed rates, charges, terms and conditions for ancillary services. 1999

Docket No. 2688 – Pascoag Fire District: Electric Rates – Testified on elements of savings resulting from renegotiation of contract with wholesale power supplier and presented analysis that justified need for and amount of base rate increase. 1998

New York State Department of Taxation and Finance Versus Zapco Energy Tactics Corporation – Testified on behalf of independent power producer in income tax case regarding tax payments associated with electric interconnection equipment. Testimony focused on policies and practices faced in doing business in New York State. 1998

Docket No. 2516 – Pascoag Fire District: Utility Restructuring – Testified on manner and means for utility's restructuring in compliance with Rhode Island Utility Restructuring Act of 1996. Testimony presented a methodology for calculating stranded cost charge, unbundled rates, and new terms and conditions of electric services in deregulated environment. 1997

Case 94-E-0334 – Consolidated Edison: Electric Rates – Led Staff team in review of utility's multi-year rate filing seeking increased rates of \$400 million. Directed team in review of resource planning, power purchase contract administration, and fuel and purchased power expenses and testified on reasonableness of company's actions regarding buy-out of contract with an independent power producer and renegotiation of contract with another independent power producer. Lead negotiations for multi-year settlement and performance-based ratemaking package that resulted in a three-year rate freeze. 1994

Case 93-G-0996 – Consolidated Edison: Gas Rates – Testified on reasonableness of utility's proposed depreciation rates. 1994

Case 93-S-0997 – Consolidated Edison: Steam Rates – Testified on reasonableness of utility's resource planning for steam utility system. 1994

Case 93-S-0997 and 93-G-0996 – Consolidated Edison: Steam Rates – Testified on reasonableness of multi-year rate plan proposed by the utility. 1994

Case 94-E-0098 – Niagara Mohawk: Electric Rates – Reviewed utility's management of its portfolio of power purchase contracts with independent power producers for the reasonableness of recovery of costs in retail rates. 1994

Case 93-E-0807 – Consolidated Edison: Electric Rates – Testified on rate recovery mechanism for costs associated with termination of five contracts with independent power producers. 1993

Case 92-E-0814 – Petition for Approval of Curtailment Procedures – Testified on methodology for estimating amount of power required to be curtailed and staff's estimate of curtailment. 1992

Case 90-S-0938 – Consolidated Edison: Steam Rates – Testified on reasonableness of utility's embedded cost of service study, and proposed revenue re-allocation and rate design. 1991

Case 91-E-0462 – Consolidated Edison: Electric Rates – Implementation of partial pass-through fuel adjustment incentive clause. 1991

Case 90-E-0647 – Rochester Gas and Electric: Electric Rates – Analysis and estimation of monthly fuel and purchased power costs for use in utility's performance based partial pass-through fuel adjustment clause. 1990

Case 29433 – Central Hudson Gas and Electric: Electric Rates – Analysis of utility's construction budgeting process, rate year electric plant in service forecast, lease revenue forecast, forecast and rate treatment of profits from sales of wholesale power and estimation of fuel and purchased power expenses for use in the utility's partial pass-through fuel adjustment clause. 1987

Case 29674 – Rochester Gas and Electric: Electric Rates – Review of utility's historic and forecast O&M

expenditure levels forecast and rate treatment of profits from wholesale power, and estimation of fuel and purchased power expenses, and price out of incremental revenues from increased retail sales. 1987

Case 29195 – Central Hudson Gas and Electric: Electric Rates – Review of utility’s construction budgeting process, analysis of rate year electric plant in service, forecast and rate treatment of profits from sales of wholesale power, and estimation of fuel and purchased power expenses. 1986

Case 29046 – Orange and Rockland Utilities: Electric Rates – Testified on the reasonableness of the utility’s proposed depreciation rates and expense levels. 1985

Case 28313 – Central Hudson Gas and Electric: Electric Rates – Review of utility’s construction budgeting process; analysis of rate year electric plant in service forecast; review of rate year operations and maintenance expense forecast; forecast and rate treatment of profits from sales of wholesale power; estimation of fuel and purchased power expenses. 1984

Case 28316 – Rochester Gas and Electric: Steam Rates – Price out of steam sales including the review of historic sales growth, usage patterns and forecast number of customers. 1984

PRESENTATIONS

National Association of State Utility Consumer Advocates Annual Conference, 2008 – Speaker on a case study of “Smart Metering”

Multiple Intervenors Annual Conference – What Will Impact Market Prices? 1998, Syracuse, New York – Speaker on the impact that deregulation would have on market prices for large industrial customers.

IBC Conference – Successful Strategies for Negotiating Purchased Power Contracts, 1997, Washington, DC – Speaker on NY power purchase contract policies, ratepayer valuation, contract approval process and policy on recovery of buyout costs.

Gas Daily Conference – Fueling the Future: Gas’ Role in Private Power Projects, 1992, Houston, Texas – Panel member addressing changing power supply requirements of electric utilities.

MEMBERSHIPS/ASSOCIATIONS

Member Municipal Electric Utility Association, Northeast Public Power Association and New York State ISO.

Paul L. Goetz, CPA

EDUCATION

B.S, Business Administration – Siena College, Albany, NY
May 1985

SUMMARY OF PROFESSIONAL EXPERIENCE

- Partner, Bollam, Sheedy, Torani & Co. LLP, CPAs, 2011 - Present
 - o Member of the Firm's *Governmental Services Group*
 - o Over 25 years of public accounting and financial consulting experience
 - o Diverse background servicing clients publicly held, privately owned, and governmental entities.
- Managing Director, UHY Advisors, September 1985 – March 2010
- State Department of Transportation Contract Audits:
 - o Arizona
 - o Connecticut
 - o New York
 - o Delaware
 - o Vermont

FIELDS OF SPECIALIZATION

- Accounting, Auditing, and Taxation Issues for:
 - o Government
 - o Architectural and engineering firms
 - o Manufacturing
 - o Insurance
 - o Employee benefit plans
 - o Publically held entities
- Significant experience with accounting due diligence with respect to mergers and acquisitions for public and privately held entities
- Significant experience with overhead rate and cost allocations studies and methodologies in accordance with Federal Acquisition Regulations and Cost Accounting Standards
- Quality control, including, recruitment and training, retention and peer reviews.

MEMBERSHIPS/ASSOCIATIONS

- Certified Public Accountant, New York State, May 1989
- Dean's Advisory Council - Siena College School of Business
- Member of the American Institute of Certified Public Accountants (AICPA)
- New York State Society of Certified Public Accountants (NYSSCPA), May 1984
- Albany-Colonie Chamber of Commerce